L9 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1967:85867 CAPLUS

DOCUMENT NUMBER:

66:85867

TITLE:

Synthesis and fragmentation of substituted

bicyclo-[3.1.0]-2-hexanones. II. (.+-.)-iso-trans-Chrysanthemic and (.+-.)-trans-chyrsanthemic acids

AUTHOR(S):

Julia, Sylvestre; Julia, Marc; Linstrumelle, Gerard

CORPORATE SOURCE: Ecole Natl. Super. Chim., Paris, Fr.

SOURCE:

LANGUAGE:

Bull. Soc. Chim. Fr. (1966), (11), 3499-507

CODEN: BSCFAS

DOCUMENT TYPE:

Journal French

GI For diagram(s), see printed CA Issue.

cf. preceding abstr. A new acid, (.+-.)-iso-trans-chrysanthemic acid (I) AΒ and (.+-.)-trans-chrysanthemic acid (II) were prepd. Dimethyl-vinyl carbinol (86 g.) was added to 47 g. 53% NaH in mineral oil and 1.2 l. benzene, the mixt. refluxed 5 hrs., cooled to -15.degree., and 104 ml. isobutyryl chloride in 50 ml. benzene added at 0 to 4.degree.. The mixt. was left overnight at room temp., added to water, and extd. with ether to give 108 g. III, b10 39.degree., n22.5D 1.4113. III (78 g.) was added dropwise to 24 g. 53% NaH in mineral oil and 160 ml. toluene at 110.degree., the mixt. kept 2 hrs. at 110.degree., cooled, 10 ml. MeOH added, and the mixt. added to ice, washed with ether, and acidified with 2N HCl to give 64 g. IV, b0.6 91.degree., n23.5D 1.4487, amide m. 73.degree. (ether-petroleum ether). IV was also prepd. from 2,2,5-trimethyl-4-hexen-1-al (V) and Ag2O (85% yield) and by sapon. of 2,2,5-trimethyl-4-hexenenitrile (VI) in ethylene glycol (85% yield). was prepd. by the method of Stork and Dowd (CA 59, 7383a). Addn. of isobutyronitrile (VII) to a mixt. of PhLi and Et2NH in ether and

of this mixt. with isoprene hydrobromide hydrate (VIII) gave 62% VI, b22 86.degree., n18D 1.4351. VI was also prepd. in 96% yield from EtMgBr, Et2NH, VII, and VIII and in 87% yield from VII, isoprene hydrochlor, and NaNH2 in benzene. A soln. of 12 g. Me iodide in 20 ml. ether was added slowly to 1.1 g. Li in 20 ml. ether. To this was added 2.6 g. IV in 10 ml. ether, the mixt. stirred overnight, ice-water added, and extd. with ether to give 2.32 g. IXa (X = Me)(X), b18 84.degree., n20D 1.44-66, also prepd. in 76% yield by treatment of VI with EtMgI in toluene. IV and (COCl)2 in ligroine gave IXa (X = Cl) (XI). XI and CH2N2 gave IXa (X = CHN2) (XII). XII in cyclohexane treated with Cu powder at reflux gave

70%

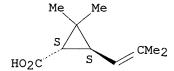
XIII, b12 75.degree., n22.5D 1.4595, oxime (XIV) m. 90-1.degree. (ether-petroleum ether). XIV (8.61 g.) was added in small portions over 30 min. to 16.8 g. PCl5 in 200 ml. anhyd. ether at -3.degree. (very exothermic reaction). The mixt. was stirred overnight at room temp., filtered, and the solid added to ice and extd. with CHCl3 to give 3% XV, m. 154.degree. (benzene-ligroine). The ether filtrate was washed with cold NaHCO3 soln., water, dried, and concd. to give 77% of a mixt. (b0.5 58-9.degree., n20D 1.4645) of XVI and XVII in approx. 4:1 ratio, and 5% XVIII, b0.7 61.degree., n24D 1.4615. XVIII decompd. to XVI and XVII when subjected to gas chromatog. Similarly, XIV was treated with PCl5 in the presence of pyridine (1.6 ml. pyridine/1.6 g. PCl5), and the ether residue

chromatographed on alumina to give 73% of a 3:2 mixt. of XVI and XVII (petroleum ether eluate) and 11% XIX, m. 111.degree. (C6H6-ligroine). Treatment of XIV with tosyl chloride in pyridine at 0.degree., then 1 hr.

at room temp. and 1 hr. at 100.degree. gave 48% XVI-XVII and 50% XIX. XVI and XVII have the cis configuration. Redn. of XVI and XVII with Adams catalyst gave cis-dihydrochrysanthemonitrile. A mixt. of XVI and XVII (310 mg.), 5 mg. p-toluenesulfonic acid (XX), and 5 ml. xylene was refluxed 2 hrs. to give a 9:1 mixt. of XVI and XVII. Sapon. of XVI-XVII (3:2) (24 hrs. reflux with KOH in ethylene glycol) gave 76% of a mixt. (b0.4 97-8.degree.) of I and II. Esterification of this mixt. with CH2N2 gave a mixt. contg. 9% iso-cis-, 45% iso-trans-, 8% cis-, and 38% trans-methyl chrysanthemate. Redn. of this mixt. gave cis- and trans-methyl dihydrochrysanthemate. The I-II mixt. (0.6 g.) refluxed 1.5 hrs. in 15 ml. xylene with 5 mg. XX gave 0.54 g. pure II. 3,3,6-trimethyl-6-hydroxyheptanenitrile (10 g.) in 4 ml. pyridine was added at 0.degree. 7.4 g. methanesulfonyl chloride, the mixt. cooled overnight, added to ice, and extd. with ether to give the methanesulfonate (XXI). XXI (1.25 g. crude) in 3 ml. dimethylformamide was added dropwise to 0.24 g. 50% NaH in mineral oil and 5 ml. dimethylformamide, the mixt. cooled, added to ice, and extd. with ether to give dihydrochrysanthemonitrile (reaction temp., time (hrs.), % yield, and cis/trans ratio given): 20.degree., 5, 86, 60/40; 65.degree., 5, 86, 53/47; 100.degree., 2, 75, 46/54; 125.degree., 1/4, 70, 33% cis, 37% trans, 30% unidentified. Redn. of 95 mg. of I-II mixt. with Adams catalyst gave XXIIa (X = H, R = H), p-phenylphenacyl ester m. 100-1.degree. (MeOH). A soln. of 5 g. II in 50 ml. anhyd. ether satd. at 0.degree. with HCl and cooled overnight gave 95% XXIIa (X = Cl, R = H) (XXIII). A mixt. of ethyl and tert-amyl chrysanthemates treated with HCl gave XXIII ethyl ester (XXIV) and XXIII in an amt. corresponding to the amyl ester. Similarly, trans-ethyl chrysanthemate and HCl in ether gave 90% XXIV, b0.8 86.degree., n21D 1.4558, also prepd. from XXIII and diazoethane. A mixt. of 74 ml. 1.5N Na tert-amylate in benzene and 19.6 g. ethyl chrysanthemate (XXV) (60% trans-40% cis) was refluxed 4 hrs., cooled, added to ice and extd. with ether to give 90% trans-esters contg. 3% cis-XXV, however the trans-esters contained 33% trans-XXV and 67% tert-amyl chrysanthemate (XXVI). The trans esters refluxed with alc. KOH gave chrysanthemic acid and pure XXVI, b0.8 85-8.degree., n24D 1.4576. XXV (30 g.) refluxed 72 hrs. in a soln. of 20.7 g. Na in 300 ml. alc. 25.5 g. trans-XXV, b0.6 70.degree., n20D 1.4556 (contg. 8% cis-ester). XXIV treated with bases, e.g. tert-BuOK, NaH in dimethylformamide, PhNEt2, or NaOEt, gave 70% XXV and 30% of the iso-isomer I. XXIV heated in C6H4Cl2 at 180.degree. gave the same results. XXIII heated with K in Et3COH at 20.degree., then heated 2 hrs. at 90.degree. (Brown, et al., CA 50, 14749e) gave 94% of a mixt. of 85% I and 15% II. I, m. 42-4.degree., amide m. 117-18.degree. (benzene), was sepd. from II by 2 recrystns. from pentane. Similarly, XXIV (4 hrs. at 85.degree.) gave 90% of a mixt. contg. 25% II and 75% I. IT 705-16-8P 7377-84-6P 13899-97-3P 13902-29-9P 13902-34-6P 13902-35-7P 14280-93-4P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 705-16-8 CAPLUS RN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, CN

(1R, 3R) - rel - (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 7377-84-6 CAPLUS

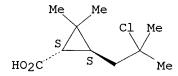
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13899-97-3 CAPLUS

CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-methylpropyl)-2,2-dimethyl-, trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.



RN 13902-29-9 CAPLUS

CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-methylpropyl)-2,2-dimethyl-, methyl ester, trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13902-34-6 CAPLUS

CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-methylpropyl)-2,2-dimethyl-, ethyl ester, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13902-35-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropenyl)-, tert-pentyl ester (8CI) (CA INDEX NAME)

RN 14280-93-4 CAPLUS

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ANSWER 22 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                          1968:39156 CAPLUS
DOCUMENT NUMBER:
                          68:39156
TITLE:
                          Chrysanthemiic acid. XVIII. New biologically active
                          acid component related to chrysanthemic acid
AUTHOR(S):
                          Matsui, Masanao; Kitahara, Takeshi
CORPORATE SOURCE:
                          Univ. Tokyo, Tokyo, Japan
SOURCE:
                          Agric. Biol. Chem. (1967), 31(10), 1143-50
                          CODEN: ABCHA6
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          English
     For diagram(s), see printed CA Issue.
     The rethronyl esters of a series of cyclopropanecarboxylic acids were
     prepd. and tested for toxicity toward the housefly and mosquito. Thus,
     the following I (R3 = H) were prepd. (R, R1, R2, b.p./mm., and nD/temp.
     given): H, H, H, 85.degree. /9, 1.4379/21.degree.; H, Me, H,
     95-100.degree. /8, 1.4378/21.degree.; H, H, Me, 100-5.degree. /15
(anilide
     m. 106.degree.), 1.4400/16.degree. (rethronyl ester n16D 1.5140); Et, H,
     Me, (II) 95-100.degree. /50, 1.4430/17.degree.; H, Me, Me, 72-5.degree.
/2
     (anilide m. 176.degree.), -; and Et, Me, Me (III) 75-80.degree. /11, -.
     II and III were obtained via .beta.-methyl-.alpha.-valerolactone, b6
     80-3.degree., n25D 1.4330, and .beta.-.alpha.-dimethyl-.alpha.-
     valerolactone, b11 98.degree., resp. I (R = H, R1 = R2 = R3 = Me) (IV), m. 121.degree. (rethronyl ester, n17D 1.5091), was prepd. by treatment of
     Me2C: CMe2 with N2CHCO2Et in the presence of CuSO4 catalyst, and
     subsequent alk. hydrolysis of the Et ester. Phys. consts. for similarly prepd. I (R1 = Me) are given in the table. V (b10 120-25.degree.;
anilide
     m. 117-18.degree., n16D 1.4565; rethronyl ester n16D 1.5000) was prepd.
     from IV by the Arndt-Eistert reaction. [TABLE OMITTED] Alkylation of
     Me2C:CHCO2Et with iso-PrBr and NaNH2, and subsequent treatment with
NaOEt,
     and then sapon. gave Me2C:C(Pr-iso)CO2H, b11 100.degree.; anilide m.
     111.degree., n15D 1.4360; rethronyl ester, n22D 1.4931. I (R = H, R1 =
R2
     = Me, R3 = CO2Me) (VI) (b0.06 120.degree., n13D 1.4634; rethronyl ester
     n14D 1.4940) was prepd. by redn. of Et .alpha.-methylsenecioate with
     LiAlH4; subsequent acetylation gave trimethallyl acetate (VII), b45
     88-92.degree., n14D 1.14365. N2CHCO2Et was added to VII to give I(R =
Et,
     R1 = R2 = Me, R3 = CH2OAc), b10 115-22.degree., n14D 1.4470, which was
     hydrolyzed with an aq. alk. soln. and, without isolation, oxidized with
     KMnO4 to I (R = H, R1 = R2 = Me, R3 = CO2H), m. 156.degree..
     Esterification with CH2N2 gave I (R = R1 = R2 = Me, R3 = CO2Me), b10
     100-2.degree., n19D 1.4500. Subsequent half-hydrolysis with KOH-MeOH
     yielded I (R = H, R1 = R2 = Me, R3 = CO2Me), b0.06 120.degree., n13D
     1.4634; rethronyl ester n14D 1.4940. VIII (Feist's acid, m.
     199-200.degree.; rethronyl ester, n14D 1.5120) was prepd. by the method
of
     Goss, et al. (CA 17: 1627). The rethronyl esters were prepd. by
     converting the acids (except VIII) to the corresponding acyl chlorides,
     followed by esterification with allethrolone (IX) in the presence of
     excess C5H5N. VIII was treated with Ac2O to give the anhydride, then
     mixed with IX to give a half-ester which was esterified with CH2N2.
     rethronyl ester of IV had the greatest toxicity. The correlation between
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chem. structure and biol. reactivity is discussed.

IT 15589-30-7P 15589-31-8P 15589-33-0P
15589-34-1P 15589-35-2P 15591-18-1P
15641-58-4P 17214-86-7P 17214-87-8P
17219-23-7P 17219-24-8P 17219-29-3P
17219-30-6P 17219-32-8P 17219-33-9P
17219-34-0P 17219-35-1P 17219-37-3P
17219-38-4P 17219-39-5P 17219-40-8P
17219-41-9P 17219-42-0P 17219-44-2P
17219-45-3P 17219-46-4P 18611-84-2P
18611-90-0P 18611-91-1P 18718-20-2P
18718-21-3P 28518-39-0P 28758-81-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 15589-30-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-methyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$

Me

O

Me

O

Me

RN 15589-31-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 $O$ 
 $Me$ 
 $O$ 
 $Me$ 
 $Me$ 
 $Me$ 
 $Me$ 
 $Me$ 
 $Me$ 
 $Me$ 

RN 15589-33-0 CAPLUS

CN Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

RN 15589-34-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, 2-methyl-4-oxo-3-(2-

propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$

Me

O

Me

Me

Me

Me

Me

Me

RN 15589-35-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

RN 15591-18-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1-methylethyl)-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

RN 15641-58-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)

RN 17214-86-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, ethyl ester (8CI, 9CI)

(CA

INDEX NAME)

RN 17214-87-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2,3-dimethyl-, ethyl ester (7CI, 8CI, 9CI) (CA INDEX NAME)

RN 17219-23-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2,3-dimethyl- (8CI) (CA INDEX NAME)

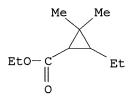
RN 17219-24-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-29-3 CAPLUS

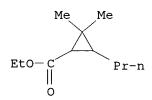
CN Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl- (8CI) (CA INDEX NAME)

RN 17219-30-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl-, ethyl ester (8CI, 9CI)
(CA INDEX NAME)

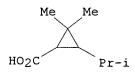


RN 17219-32-8 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl- (8CI) (CA INDEX NAME)

RN 17219-33-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl-, ethyl ester (8CI)
(CA INDEX NAME)



RN 17219-34-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-isopropyl-2,2-dimethyl- (8CI) (CA INDEX NAME)



RN 17219-35-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-isopropyl-2,2-dimethyl-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

RN 17219-37-3 CAPLUS

CN [1,1'-Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl- (9CI) (CA INDEX NAME)

RN 17219-38-4 CAPLUS

CN [Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl-, ethyl ester (8CI) (CA INDEX NAME)

RN 17219-39-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-40-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl-, ethyl ester (8CI) (CA INDEX NAME)

RN 17219-41-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-42-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl-, ethyl ester (8CI) (CA INDEX NAME)

RN 17219-44-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[(acetyloxy)methyl]-2,3,3-trimethyl-, ethyl

ester (9CI) (CA INDEX NAME)

RN 17219-45-3 CAPLUS

CN 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-46-4 CAPLUS

CN 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, diethyl ester (8CI) (CA INDEX NAME)

RN 18611-84-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-,
2-methyl-4-oxo-3-(2-propenyl)2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 $O$ 
 $Me$ 
 $O$ 
 $Me$ 
 $Me$ 
 $Me$ 

RN 18611-90-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

RN 18611-91-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

RN 18718-20-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2,3-dimethyl-, ester with 2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$

Me
O
Me
O
Me
Me
Me
Me

RN 18718-21-3 CAPLUS

CN [Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl-, ester with 2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

RN 28518-39-0 CAPLUS

CN 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, monomethyl ester (8CI) (CA INDEX NAME)

CM 1

CRN 17219-45-3 CMF C8 H12 O4

CM 2

CRN 67-56-1 CMF C H4 O

нзс-он

RN 28758-81-8 CAPLUS

CN 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, methyl ester, ester with 2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

CM 1

CRN 29605-88-7 CMF C9 H12 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2\text{--}\text{CH} \\ \hline \\ \text{HO} & \text{Me} \end{array}$$

CM 2

CRN 17219-45-3 CMF C8 H12 O4

CM 3

CRN 67-56-1 CMF C H4 O

нзс-он

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STRUCTURE FILE UPDATES: 17 JUL 2002 HIGHEST RN 439210-99-8 DICTIONARY FILE UPDATES: 17 JUL 2002 HIGHEST RN 439210-99-8

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

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Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

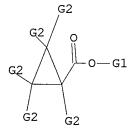
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L1 STRUCTURE UPLOADED

=> d L1 HAS NO ANSWERS

L1 RAS NO ANSWERS

L1 STR



G1 Cb,Ak G2 H,X,Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11 ful

FULL SEARCH INITIATED 08:49:41 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 63313 TO ITERATE

100.0% PROCESSED 63313 ITERATIONS

26737 ANSWERS

SEARCH TIME: 00.00.04

L2 26737 SEA SSS FUL L1

=>

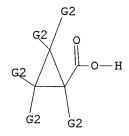
Uploading 10053680.str

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR



G1 Cb, Ak

G2 H, X, Cb, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 13 ful

FULL SEARCH INITIATED 08:50:16 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 16561 TO ITERATE

100.0% PROCESSED 16561 ITERATIONS SEARCH TIME: 00.00.01

5138 ANSWERS

L4 5138 SEA SSS FUL L3

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 280.56 280.77

FULL ESTIMATED COST

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=> s 12/p L5 5008 L2/P

=> s 15 and 14 4148 L4 L6 1760 L5 AND L4

=> s 16 and catalyst? 747371 CATALYST? L7 139 L6 AND CATALYST?

=> d 1-139 ibib abs hitstr

```
ANSWER 1 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 2002:158381 CAPLUS
MENT NUMBER: 136:218618
L7 ANSWER 1 OF 135
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
compound
INVENTOR(5):
PATENT ASSIGNEE(5):
SOURCE:
                                                     Process for producing carbonyl or hydroxy
                                                     Hagiya, Koji; Takano, Naoyuki; Kurihara, Akio
                                                     Japan
U.S. Pat. Appl. Publ., 16 pp.
CODEN: USXXCO
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                    Patent
English
          PATENT NO.
                                              KIND DATE
                                                                                          APPLICATION NO. DATE
          US 2002025906 A1 20020228 US 2001-925523 20010810
JP 2002201174 A2 20020716 JP 2001-241895 20010810
EP 1188735 A1 20020320 EP 2001-119369 20010810
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
```

PT, IE, SI, LT, LV, FI, RO
JP 2002201173 A2 20020716
JP 2002201166 A2 20020716
JP 2002201146 A2 20020716
JP 2002201154 A2 20020716
JP 2002201147 A2 20020716
PRIORITY APPLN. INFO.: IE, SI, LT, LV, FI, RO

JP 2002201173 A2 20020716 JP 2001-326075 20011024

JP 2002201146 A2 20020716 JP 2001-326076 20011024

JP 2002201146 A2 20020716 JP 2001-332090 20011030

JP 2002201147 A2 20020716 JP 2001-334334 20011031

JP 2002201147 A2 20020716 JP 2001-334334 20011031

JP 2000-201147 A2 20020716 JP 2001-334334 20011031

JP 2000-32812 A 20000811

JP 2000-328812 A 20001027

JP 2000-328912 A 20001027

JP 2000-337150 A 20001106

JP 2000-337151 A 20001106

JP 2000-347151 A 20001106

JP 2000-347151

carbonyl compd. and a hydroxy adduct compd. by an oxidative cleavage

addn. reaction of an olefinic double bond of an olefin compd., which contains reacting an olefin compd. with peroxide, using as a catalyst, at least one member selected from (a) tungsten, (b) molybdenum, or (c) a tungsten or molybdenum metal compd. contg, (ia) tungsten or (ib) molybdenum and (ii) an element of Group IIIB, IVB, or

or VIB excluding oxygen, and a catalyst compn. Thus, 2 g 30% aq. hydrogen peroxide soln. and 97 mg metallic tungsten were agitated at 60.degree. for 0.5 h, a soln. of 3.5 g isophorone and 25.8 g 30% aq. hydrogen peroxide was added dropwise over 20 min, and the mixt. was agitated at 95.degree. for 6 h to give 3,3-dimethyl-5-oxohexanoic

acid. 41301-44-4P 76842-27-8P 401910-16-5P

RL: IMF (Industrial manufacture), PREP (Preparation) (process for producing carbonyl or hydroxy compd.) 41301-44-4 CAPLUS

41301-44-3 CAPLDS Cyclopropanecarboxylic acid, 3-formyl-2,2-dimethyl-, methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 1 OF 139 CAPLUS COPYRIGHT 2002 ACS

L7 ANSWER 1 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

76842-27-8 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, monomethyl ester RN CN (9CI) (CA INDEX NAME)

RN 401910-16-5 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-hydroperoxy-1-hydroxy-2-methylpropyl)2,2-dimethyl-, methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 401910-17-6 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1,2-dihydroxy-2-methylpropyl)-2,2-dimethyl, methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:145067 CAPLUS
DOCUMENT NUMBER: 136:340569
In Search of High Stereocontrol for the
Construction

of cis-Disubstituted Cyclopropane Compounds. Total Synthesis of a Cyclopropane-Configured Urea-PETT Analog That Is a HIV-1 Reverse Transcriptase

Hu, Wenhor Timmons, Daren J.; Doyle, Michael P. Department of Chemistry, University of Arizona, Tucson, AZ, 85721, USA
Organic Letters (2002), 4(6), 901-904
CODEN: ORLEF7; ISSN: 1523-7660
American Chemical Society
Journal
English Inhibitor AUTHOR(S): CORPORATE SOURCE:

SOURCE:

PUBLISHER

DOCUMENT TYPE: LANGUAGE: GI

A new azetidine-ligated dirhodium(II) catalyst that possesses a 1-menthyl ester attachment provides significant diastereocontrol and  $\alpha$ AB high

I

enantiocontrol for the formation of cis-cyclopropane products from reactions of substituted styrenes with diazo esters. The prepn. of urea-PETT analog I is described.
417709-99-89-89-417709-90-19-417709-92-39

īТ

RL: RCT (Reactant), SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(high stereocontrol for construction of cis-disubstituted

(high stereocours)
cyclopropane
compds.)
RN 417709-89-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(6-chloro-3-ethoxy-2-fluorophenyl)-,

Absolute stereochemistry. Rotation (+).

417709-90-1 CAPLUS Cyclopropanecarboxylic acid, 2-(6-chloro-3-ethoxy-2-fluorophenyl)-, 1,1-dimethylethyl ester, (1S,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

417709-92-3 CAPLUS 417/03-92-3 CAREDO Cyclopropanecarboxylic acid, 2-(6-chloro-3-ethoxy-2-fluorophenyl)-, (15,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

INDEX NAME)

IT 34703-00-9P 105367-35-9P 105367-37-1P 105367-39-3P 417709-910-9P 417709-80-9P 417709-81-9P 417709-81-2P 417709-81-2P 417709-81-2P 417709-81-6P 417709-81-2P 417709-81-2P RJ: SFN (Synthetic preparation) FREP (Preparation) (high stereocontrol for construction of cis-disubstituted cyclopropane compds.)

RN 34703-00-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1S,2R)- (9CI) (CA

Absolute stereochemistry. Rotation (+).

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

417709-80-9 CAPLUS Cyclopropanecarboxylic acid, 2-[4-(trifluoromethyl)phenyl]-, l,l-dimethylethyl ester, (1R, 2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

417709-81-0 CAPLUS Cyclopropanecarboxylic acid, 2-(2-chlorophenyl)-, 1,1-dimethylethyl (1R, 2R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 417709-82-1 CAPLUS CN Cyclopropanecarboxylic acid, 2-{2,6-dichlorophenyl}-, 1,1-dimethylethyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 417709-83-2 CAPLUS

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 105367-35-9 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, (15,2R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

105367-37-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1S,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

105367-39-3 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (15,2R,5S)-5-methyl-2-{1-methylethyl)cyclohexyl ester, (15,2R)- (9CI) (CA INDEX NAME)

417709-79-6 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methylphenyl)-, 1,1-dimethylethyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) CN Cyclopropanecarboxylic acid, 2-(2,4,6-trimethylphenyl)-, 1,1-dimethylethyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 417709-84-J CN Cyclopropanecarboxylic ac-ester, (1s,2R)- (9CI) (CA INDEX NAME) 417709-84-3 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methylphenyl)-, 1,1-dimethylethyl

417709-85-4 CAPLUS Cyclopropanecarboxylic acid, 2-[4-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester, (18,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

417709-86-5 CAPLUS Cyclopropanecarboxylic acid, 2-(2-chlorophenyl)-, 1,1-dimethylethyl (1s,2r)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 417709-87-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(2,6-dichlorophenyl)-,
1,1-dimethylethyl
ester, (15,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 417709-88-7 CAPLUS
CN Cyclopropaneoarboxylic acid, 2-(2,4,6-trimethylphenyl)-,
1,1-dimethylethyl
ester, (1S,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry

417709-91-2 CAPLUS
Cyclopropanecarboxylic acid, 2-(6-chloro-3-ethoxy-2-fluorophenyl)-,
1,1-dimethylethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 3 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:62872 CAPLUS
DOCUMENT NUMBER: 156:278989
On the mechanism of the copper-catalyzed cyclopropanation reaction
AUTHOR(S): Rasmussen, Torbens Jensen, Jakob F.; Ostergaard, Niels; Tanner, David; Ziegler, Tom; Norrby,

Per-Ola CORPORATE SOURCE: School Department of Medicinal Chemistry, Royal Danish

of Pharmacy, Copenhagen, 2100, Den. . Chemistry--A European Journal (2002), 8(1), SOURCE:

CODEN: CEUJED: ISSN: 0947-6539 Wiley-VCH Verlag GmbH Journal

PUBLISHER:

PUBLISHER: Wiley-VCH veriag General DOCUMENT TYPE: Journal LANGUAGE: Briglish AB The selectivity-detg. step in enantioselective copper-catalyzed cyclopropanation with diazo compds. has been studied by exptl. and computational methods. The addn. of the very reactive metallacarbeen intermediate in an early transition state to the substrate alkene is concerted but strongly asynchronous, with substantial cationic

on one alkene carbon in the neighborhood of the transition state. Evidence from isotope effects and Hammett studies supports the nature or the

transition state. Formation of a metallacyclobutane

the transition seems. The transition intermediate by a intermediate by a [2+2] addn. is kinetically disfavored. Ligand-substrate interactions influencing the enantio- and diastereoselectivity have been

and the preferred orientation of the alkene substrate during the

addn. is

ΙT

. 13 suggested.
1759-53-1, Cyclopropanecarboxylic acid
RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation,

preparative; (computational study; exptl. and computational study of the mechanism

of enantioselective copper-catalyzed cyclopropanation of alkenes with

diazo compds.) 1759-53-1 CAPUS Cyclopropanecarboxylic acid (6Cl, 7Cl, 8Cl, 9Cl) (CA INDEX NAME)



946-38-3P 34716-60-4P 67478-53-9P 70461-59-5P 70461-62-0P 207279-34-3P 207279-35-4P 395676-47-0P 395676-59-2P 406459-08-3P 406459-09-4P 406459-10-7P 406459-11-9P 406459-12-9P RL: SPN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 2 OF 139 CAPLUS COPYRIGHT 2002 ACS (COntinued)
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

(CA INDEX NAME)

34716-60-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (-).

67478-53-9 CAPLUS Cyclopropanecarboxylic acid, 2-{4-methoxyphenyl}-, ethyl ester, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

70461-59-5 CAPLUS

Relative stereochemistry.

Cyclopropanecarboxylic acid, 2-(4-methylphenyl)-, ethyl ester, (1R,2S)-rel- (9CI) (CA INDEX NAME)

70461-62-0 CAPLUS RN 70461-62-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(4-nitrophenyl)-, ethyl ester,
(IR,2S)-rel
(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 207279-34-3 CAPLUS CN Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-, ethyl ester, (1R, 2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 207279-35-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(4-methylphenyl)-, ethyl ester,
(1R,2R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

 $\begin{array}{lll} {\tt 395676-47-8} & {\tt CAPLUS} \\ {\tt Cyclopropanecarboxylic\ acid,\ 2-[4-(trifluoromethyl)phenyl]-,\ ethyl \end{array}$ 

L7 ANSWER 3 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 406459-10-7 CAPLUS
CN Cyclopropane-2,2-d2-carboxylic acid, 3-phenyl-, ethyl ester,
(1R,3S)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN CN (9CI) 406459-11-8 CAPLUS Cyclopropane-2-d-carboxylic acid, 3-phenyl-, ethyl ester, (1R,2R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 406459-12-9 CAPLUS CN Cyclopropane-2-d-carboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)-rel-(SCI) (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT: FOR THIS

42 THERE ARE 42 CITED REFERENCES AVAILABLE RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 3 OF 139 CAPLUS COPYRIGHT 2002 ACS (1R, 2R) - (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

395676-59-2 CAPLUS Cyclopropanecarboxylic acid, 2-[4-(trifluoromethyl)phenyl]-, ethyl (1R, 2S) - rel - (9CI) (CA INDEX NAME)

Relative stereochemistry.

406459-08-3 CAPLUS Cyclopropanecatoxylic acid, 2-(4-nitrophenyl)-, ethyl ester, (1R,2R)-(SCI) (CA INDEX NAME)

Absolute stereochemistry.

406459-09-4 CAPLUS Cyclopropane-2,2-d2-carboxylic acid, 3-phenyl-, ethyl ester, (1R,3R)-(9CI) (CA INDEX NAME)

L7 ANSWER 4 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:886126 CAPLUS DOCUMENT NUMBER: 136:6298 TITLE: Preparation of Novel tr Preparation of Novel triazolo pyrimidine

compounds as

pharmaceuticals Larsson, Ulfr Magnusson, Mattias; Musil, Tibor; Palmgren, Andreas Astrazeneca AB, Swed. PCT Int. Appl., 29 pp. CODEN: PIXXD2 INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English

	PATENT 1	KIND		DATE			APPLICATION NO.					DATE				
	WO 2001092263								WO 2001-SE124							
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	BZ,	CA,	CH,
CN,		~~	-													
GH.		co,	CR,	co,	CZ,	DE,	DK,	UM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,
GII,		GM.	HR.	HU.	ID.	TI	TN.	IS.	JP.	KE.	KG.	KP.	KB.	KZ,	IC.	T.K.
LR,		٠,	,	110,	,	,	,	10,	σ.,	144,	100,	1/1 ,	ıu,	KL,	LC,	mr,
		LS,	LŤ,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,
PT,																
***		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,
US,		117	NA.	911	7.5	7717	7.14		nv	wo	120	wn	DII	m T	<b></b>	
	RW.													TJ,		CTU
CY,		G11,	٠,	.ш,	20,		110,	JD,	эц,	54,	,	00,	24,	Α,,	DE,	CIL,
-		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
BF,																
					CI,	CM,	GΑ,							TD,		
PRIORITY APPLN. INFO.: GB 2000-13488 A 20000602														2000		

SE 2000-2102 A 20000606 CASREACT 136:6298 OTHER SOURCE(S):

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The present invention relates to the prepn. of pyrimidine compds.,

useful as pharmaceutical intermediates, to a process for prepg. the pyrimidine compds., to intermediates used in the process, and to the

of said pyrimidine compds. in the prepn. of pharmaceuticals, e.g. II. Thus, II was prepd. from the coupling of 4,6-dichloro-2-(propylsulfanyl)-5-pyrimidinamine and 2-[([3aR,45,6R,6aS)-6-amino-2,2-dimethyltetrahydro-3aH-cyclopenta[d][1,3]-dioxol-4-yl]oxy)-1-ethanol L-tartaric acid salt, hydrogenation of the resulting carbocyclic nucleoside I using a heavy

ANSWER 4 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) metal catalyst, coupling with trans-2-(3,4-difluorophenyl)cyclopropanaminium (2R)-2-hydroxy-2-phenylethanoate, L7

and

deprotection.
220352-36-3P 376608-68-3P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation); RACT (Reactant or reagent) (prepn. of novel triazolo pyrimidine compds. as pharmaceuticals) 220352-36-3 CAPLUS Cyclopropanecarboxylic acid, 2-(3,4-difluorophenyl)-, (1R,2R)- (9CI)

RN CN (CA

Absolute stereochemistry.

RN 376608-68-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(3,4-difluorophenyl)-,
(1R,2S,5R)-5-methyl2-(1-methylchyl)cyclohexyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RI: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (prepn. of novel triazolo pyrimidine compds. as pharmaceuticals)
RN 376608-69-4 CAPLUS
CN Cyclopropaneararboxylic acid, 2-(3,4-difluorophenyl)-,
(1R,2S,5R)-5-methyl-

2-(1-methylethyl)cyclohexyl ester, (15,25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 5 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:423016 CAPLUS
DOCUMENT NUMBER: 136:216891
HODGITHE OXIDATION OF (+)-3-carene by potassium permanganate permanganate to Tolstikov, G. A.; Galin, F. Z.; Ignatyuk, V. K.; Kashina, Yu. A.; Zelenova, L. M.
CORPORATE SOURCE: Inst. Organic Chem., Russian Acad. Sci., Ufa,

Russia SOURCE: 338-340 Khimiya Prirodnykh Soedinenii (1992), (3,4),

CODEN: KPSUAR, ISSN: 0023-1150 Izdatel'stvo Fan Journal English CASREACT 136:216891

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

AB The oxidn. of (+)-3-carene under the conditions of phase-transfer catalysis has been studied. It has been shown that when the reaction is performed in acetic acid the keto acids I and II and (-)-3-alpha.-hydroxycaran-4-one are formed.

1 14087-75-39 7023-33-55

RL: SPM (Synthetic preparation); PREF (Preparation) (oxidn. of (+)-3-carene by potassium permanganate under phase-transfer

use-transfer catalysis conditions) 14087-75-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-oxopropyl)-, methyl

ester (1R, 35) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

70223-33-5 CAPLUS

L7 ANSWER 4 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

REFERENCE COUNT: THIS

THERE ARE 4 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 5 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-oxopropyl)-, (1R,3s)-L7 CN (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

```
ANSWER 6 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 2001:222368 CAPLUS
MENT NUMBER: 135:61078
 ACCESSION NUMBER:
DOCUMENT NUMBER:
                                                        Synthesis of
 TITLE: (1S)-1-amino-2,2-dimethylcyclopropane-1-
carboxylic acid via PLE mediated hydrolysis of
bis(2,2,2-trifluoroethyl)
  2,2-dimethylcyclopropane-1,1-
                                                       -1,1-
dicarboxylate
Salgado, A.; Huybrechts, T.; Eeckhaut, A.; Van
 AUTHOR(S):
                                                        Eycken, J.; Szakonyi, Z.; Fulop, F.; Tkachev,
 A.; De
                                                       Kimpe, N.
Faculty of Agricultural and Applied Biological
Sciences, Department of Organic Chemistry, Ghent
University, Ghent, B-9000, Belg.
Tetrahedron (2001), 57(14), 2781-2786
CODEN: TETRAB; ISSN: 0040-4020
Elsevier Science Ltd.
Journal
  CORPORATE SOURCE:
  SOURCE:
CODEN: TETRAB; ISSN: 0040-4020

Blasvier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

CASREACT 135:61078

AB A stereoselective synthesis of 
(15)-1-anino-2,2-dimethylcyclopropane-1-

carboxylic acid is described. For example, hydrolysis of 
bis(2,2,2-trifluoroethyl) 2,2-dimethylcyclopropane-1,1-dicarboxylate 
with
 pig liver esterase (FLE) afforded (1R)-2,2-dimethyl-1-{2,2,2-trifluoroethoxycarbonyl}-cyclopropane-1-carboxylic acid in high enantiomeric excess. This compd. was rearranged to 2,2,2-trifluoroethyl
 (1S)-2,2-dimethyl-1-[(N-ethoxycarbonyl)amino]-cyclopropane-1-carboxylate via a Curtius type reaction with DPPA. Final alk. hydrolysis gave (1S)-1-amino-2,2-dimethylcyclopropane-1-carboxylic acid.
IT 345978-25-8P
             JABN's-12-59

RE: BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(enantioselective prepn. of (amino)dimethylcyclopropanecarboxylic
  acid
                  with esterase-mediated ester hydrolysis and Curtius rearrangement
 a5
           key steps)
34,978-25-8 CAPLUS
14,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-, mono(2,2,2-trifluoroethyl) ester, (1R)- (9CI) (CA INDEX NAME)
 Absolute stereochemistry. Rotation (+).
          ANSWER 6 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-, bis(2,2,2-trichloroethyl) ester (9CI) (CA INDEX NAME)
                     O-CH2-CC13
       345978-23-6 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-,
bis(2,2-dichlorobutyl)
ester (9CI) (CA INDEX NAME)
                          0-CH2-CC12-Et
               C-O-CH2-CC12-Et
RN 345978-24-7 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-,
bis (2,2-dichlorohexyl)
ester (SCI) (CA INDEX NAME)
         345978-24-7 CAPLUS
                          0-CH2-CCl2-Bu-n
```

THERE ARE 43 CITED REFERENCES AVAILABLE
RECORD. ALL CITATIONS AVAILABLE IN THE RE

0-CH2-CC12-Bu-n

REFERENCE COUNT: FOR THIS

```
ANSWER 6 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
10147-54-3P 18795-95-4P 345978-21-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
   L7
IT
   RACT
              (Reactant or reagent) (enantioselective prepn. of (amino)dimethylcyclopropanecarboxylic
   acid
                     with esterase-mediated ester hydrolysis and Curtius rearrangement
            key steps)
10147-54-3 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl- (7CI, 9CI) (CA INDEX NAME)
   as
                      CO2H
                  CO2H
             18795-95-4 CAPLUS
              1.1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-, dimethyl ester (8CI, 9CI) (CA INDEX NAME)
             345978-21-4 CAPLUS
              343976-21-4 CAFLUS
1,1-Cyclopropanedicarboxylic acid, 2,2-dimethyl-, bis(2,2,2-trifluoroethyl) ester (9CI) (CA INDEX NAME)
                       0
||
|C-0-CH2-CF3
                        О— СH2 — СF3
            345978-22-5F 345978-23-6F 345978-24-7F
RL: SPN (Synthetic preparation); PREP (Preparation)
[enantioselective prepn. of (amino)dimethylcyclopropanecarboxylic
                   with esterase-mediated ester hydrolysis and Curtius rearrangement
             key steps)
345978-22-5 CAPLUS
 RN
 L7 ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:893122 CAPLUS
DOCUMENT NUMBER: 134:233023
TITLE: 2000:893122 CAPLUS
Synthesis and stereostru
relationship of
                                                          Synthesis and stereostructure-activity
                                                          three asymmetric center pyrethroids: 2-methyl-3-phenylcyclopropyl-methyl
 3-phenoxybenzyl
                                                         ether and cyanohydrin ester
Nishii, Y.; Maruyama, N.; Wakasugi, K.; Tanabe, Y.
The Physical Chemical Research Institute (RIKEN),
Wako, Saitama, 351-0198, Japan
Bioorganic & Medicinal Chemistry (2001), 9(1),
33-39

CODEN: EMECEF, ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOUNCE(s): CASREACT 134:233023

AB 2-Methyl-3-phenylcyclopropylmethyl 3-phenoxybenzyl ether 2 and cyanohydrin

ester 3, a couple of pyrethroids with three asym. centers, were synthesized. Of each of the four disastereomers of 2 and 3, only the (IR*, 2R*, 3R*)-2a and 3a showed significant insecticidal activities.

Dual
Dual sets of enantiomers [(1R, ZR, 3R) -(-)-2a and (1S, 2S, 3S) -(+)-2a] and [(1R, ZR, 3R) -(-)-3a and (1S, 2S, 3S) -(+)-3a] were synthesized through the asym. cyclopropanation using the Aratani catalyst. Significant sepns of insecticidal activities were obsd. between both the enantiomers against the tobacco cutworm (Spodoptera litura) and the common mosquito
 (Culex pipiens pallens): (15,25,35)-(+)-2a and (+)-3a showed higher activities than their antipodes (1R,2R,3R)-(-)-2a and (-)-3a. This result
             is the second example of such synthetic pyrethroids with three asym.
           centers.

27189-94-2P 27189-95-3P 121422-15-9P

121422-16-0P 135969-86-7P 135969-87-8P

153665-50-0P 135965-81-1B 330672-10-1P

330672-11-2P 330672-12-3P 330672-13-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
           (Reactant or reagent) (intermediate in synthesis of asym. center pyrethroids) 27189-94-2 CAPLUS
Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (1R,2s,3s)-rel- (9CI) (CA INDEX NAME)
```

Relative stereochemistry.

ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

27189-95-3 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (1R,2R,3R)-rel-(CA INDEX NAME)

121422-15-9 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (1R,2R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

121422-16-0 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (1R,2S,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

135969-86-7 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester,

L7 ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS

330672-10-1 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (1R,2S,3R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

330672-11-2 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (IR, 2R, 3S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

330672-12-3 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (1R,2R,3R)- (9CI) RN CN (CA

Absolute stereochemistry. Rotation (-).

RN 330672-13-4 CAPLUS

ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS (1R, 2R, 3S)-rel- (9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry.

135969-87-8 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (1R, 2S, 3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 153665-50-0 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (15,25,35) (OA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 153665-51-1 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, ethyl ester, (1S, 2R, 3R) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, (15,25,35)- (9CI)

Absolute stereochemistry. Rotation (+).

IT 330653-25-3P 330653-26-4P 330653-27-5P 330653-28-6P 330653-34-4P 330653-35-5P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); RIOL

(Biological study), PREP (Preparation)
(synthesis of asym. center pyrethroids)
330653-25-3 CAPLUS
Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R, ZR, 3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

330653-26-4 CAPLUS
Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R,2S,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

330653-27-5 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R,2S,3R)-rel- (9CI) (CA INDEX NAME) L7 ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

330653-28-6 CAPLUS
Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R,2R,3S)-rel- (9CI) (CA INDEX NAME)

330653-34-4 CAPLUS

Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (1R,2R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

330653-35-5 CAPLUS

Cyclopropanecarboxylic acid, 2-methyl-3-phenyl-, cyano(3-phenoxyphenyl)methyl ester, (15,25,35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 8 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:739250 CAPLUS
DOCUMENT NUMBER: 134:237222
TITLE: 3yrthesis of cyclopropylamine
AUTHOR(S): 5yrthesis of cyclopropylamine
Yi, Jianming, Tang, Kuowen; Huang, Liang
Department of Chemical Engineering, Yueyang

University, Yueyang, 414000, Peop. Rep. China Jingxi Huagong (2000), 17(9), 552-555, 557 CODEN: JIMUEJ, ISSN: 1003-5214 Jingxi Huagong Bianjibu Journal SOURCE:

PUBLISHER:

DOCUMENT TYPE: LANGUAGE:

Chinese CASREACT 134:237222 OTHER SOURCE(S):

OTHER SOURCE(S): CASREACT 134:237222

AB Cyclopropylamine was synthesized from .gamma.-butyrolactone and isopropanol by five step reactions. The five step reactions comprise ring-opening esterification of .gamma.-butyrolactone with isopropanol and thionyl chloride to form iso-Pr .gamma.-chlorobutyrate (I);

cyclizing I

cyclizing I using solid-liq. phase transfer catalysis (PTC) to from iso-Pr cyclopropanecarboxylate (II), hydrolyzing II in the presence of liq./liq.

PTC and neutralizing to give cyclopropanecarboxylic acid (III), then acylating III with urea to form cyclopropanecarboxamide (IV) and

ann degrdn of IV to give cyclopropylamine. Phase transfer catalysis was

used in the two key steps of cyclization and hydrolysis, and effects of

types and amt. of PTC, reaction temp. and molar ratio of reactants on the yield

were discussed. Results of expts. show that the new synthesis method is

superior to the those from the literature and is feasible for prodn.

simple processes, mild reaction conditions and cheap materials. The total

total
yield of cyclopropylamine was summed up to 52.6%.

IT 1759-53-1P, Cyclopropanecarboxylic acid 6887-83-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Freparation);

(Reactant or reagent)
(cyclopropylamine prepn. with phase transfer catalysis)
1759-53-1 CAPLUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

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6887-83-8 CAPLUS Cyclopropanecarboxylic acid, 1-methylethyl ester (9CI) (CA INDEX

L7 ANSWER 7 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

L7 ANSWER 8 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Ruthenium-catalysed addition of carboxylic acids TITLE: onto

1-ethoxy-2-ethynylcyclopropane to yield functional

allenes with skeletal rearrangement Emme, Ingo: Bruneau, Christian: De Meijere, AUTHOR (S):

Armin;

Dixneuf, Pierre H. Laboratoire de Chimie de Coordination et CORPORATE SOURCE: Catalyse, UMR 6509: CNRS - Universite de Rennes, Rennes,

F-35042,

Synlett (2000), (9), 1315-1317 CODEN: SYNLES, ISSN: 0936-5214 Georg Thieme Verlag Journal SOURCE:

PUBLISHER:
DOCUMENT TYPE:
LANGUAGE:
OTHER SOURCE(S):
AB The selective

NORS: SOUTH NORS: English R SOURCE(S): CASREACT 134:4521 The selective one-step transformation of trans-1-ethoxy-2-ethynylcyclopropane by a formal 1,4-addh. of carboxylic acids with cyclopropyl-ring opening into al

achieved

with the binuclear ruthenium precatalyst [Ru(O2CH) (CO) 2 (PPh3)] 2. The products combine a reactive allene moiety and a protected aldehyde functionality, and thus offer themselves as versatile building blocks for org. synthesis.

17 306143-30-8P RL: SPN (Synthetic preparation); PREF (Preparation) (prepn. of)
RN 308143-30-8 CAPLUS
CN Cyclopropanecarboxylic acid, 1-ethoxy-3,4-pentadienyl ester (9CI) (CA)

INDEX NAME)

1759-53-1, Cyclopropanecarboxylic acid RL: RCT (Reactant), RACT (Reactant or reagent) (ruthenium-catalyzed addn. of carboxylic acids onto ethynylcyclopropane) 1759-53-1 CAFLUS

Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:690434 CAPLUS
DOCUMENT NUMBER: 134:17149
TITLE: Asymmetric cyclopropanation of vinyl fluorides:
access

to enantiopure monofluorinated cyclopropane carboxylates Meyer, Oliver G. J.; Frohlich, Roland; Haufe, AUTHOR(S):

Gunter CORPORATE SOURCE:

Gunter

CORPORATE SOURCE:

Organisch-Chemisches Institut, Westfalische Wilhelms-Universitat Munster, Munster, D-48149, Germany

SOURCE:

SOURCE:

SOURCE:

PUBLISHER:

Georg Thieme Verlag

DOCUMENT TYPE:

Journal
LANGUAGE:

English

OTHER SOURCE(s):

CASREACT 134:17149

AB The transition metal catalyzed cyclopropanation with alkyl diazoacetates
of aliph or arom. vinyl fluorides, prepd. from the corresponding alkenes

by bromofluorination and subsequent dehydrobromination, provides a smooth

smooth
access to racemic 1:1 mixts, of cis/trans isomeric monofluorinated
cyclopropaneoarboxylates. The application of enantiopure
bis(oxacoline)
ligands and Cu(I) triflate makes the reaction
trans-disastereoselective and
enantioselective. For example, treatment of .alpha.-fluorostyrene
with

with

with

tert-Bu diazoacetate in the presence of 2 molt of the catalyst
prepd. from (5)-tert-leucine-based 2,2-bis(4-tert-buty1-2-oxazolin-2yl)propane and CuOTf gave a 4:1 mixt. of trans-2-fluoro-2phenylcyclopropanecarboxylate (4e) with 931 ee and the corresponding
cis-isomer 5e with 894 ee. The abs. configuration of the

trans-isomer 4e
is (15,25) by X-ray structure anal. of a deriv.

17 309242-41-9P 309242-42-PP 309242-43-IP
309242-41-9P 309242-43-IP 309242-43-IP
Bi: SN (Synthetic preparation), PDPP (Preparation)

309242-44-29
RL: SPN (Synthetic preparation): PREP (Preparation)
(asym. cyclopropanation of vinyl fluorides by alkyl diazoacetates catalyzed by copper triflate and oxazoline derivs.)
309242-41-9 CAPLUS
Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, 1,1-dimethylethyl

ester, (1R, 2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 9 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

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REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L7 ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) RN 309242-42-0 CAPLUS CON Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, (1R, 28, 5R)-5-methyl-2-(1-

methylethyl)cyclohexyl ester, (15,25) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

309242-43-1 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, 1,1-dimethylethyl

ester, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

309242-44-2 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, 25,58)-5-nethyl-2-(1-methylethyl)cyclohexyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

309242-52-2P 309242-53-3P 309242-54-4P 309242-55-5P 309242-56-6P 309242-57-7P 309242-58-8P

309242-58-8P RL: SPN (Synthetic preparation), PREP (Preparation) (copper-catalyzed asym. cyclopropanation of vinyl fluorides by

diazoacetates giving)
309242-52-2 CAPLUS
Cyclopropanecarboxylic acid, 2-(4-chlorophenyl)-2-fluoro-, ethyl

ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (1s,2s) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 309242-55-CN Cyclopropaneoarboxylic accepter, (1s,2s,3R)- (9CI) (CA INDEX NAME) 309242-53-3 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-methyl-2-phenyl-, ethyl

Absolute stereochemistry. Rotation (-).

309242-54-4 CAPLUS Cyclopropanecarboxylic acid, 2-butyl-2-fluoro-, ethyl ester, (15,25)-(SCI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

309242-55-5 CAPLUS Cyclopropanecarboxylic acid, 2-(4-chlorophenyl)-2-fluoro-, ethyl (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L7 ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

TТ 309242-46-4P SUSZAZ-40-5W RE: FRP (Properties), SPN (Synthetic preparation), PREP (Preparation) (prepn. and crystal structure of) 309242-46-4 CAPLUS

Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, (1R,2S)-rel- (9CI)

INDEX NAME)

Relative stereochemistry.

IT 309242-33-9P
RL: RCT (Reactant); SPN (Synthetic preparation); FREP (Preparation);

(Reactant or reagent)

(Reactant or reagent)

(prepn. and lipase-catalyzed stereoselective hydrolysis of)

(N Oyclopropanecathoxylic acid, 2-fluoro-2-phenyl-, ethyl ester,

(IR, 2R) - rel
(SCI (CA INDEX NAME)

Relative stereochemistry

309242-34-0P 309242-35-1P 309242-36-2P 309242-36-4P 309242-39-5P 309242-40-8P 309242-47-5P 309242-48-6P 309242-51-1P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 309242-34-0 CAPLUS Cyclopropanecarboxylic acid, 2-(4-chlorophenyl)-2-fluoro-, ethyl RN 309242-3-3 Cyclopropanecarboxylic successful (1R, 2R)-rel- (9CI) (CA INDEX NAME)

ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 309242-56-6 CAPLUS

JUSEW-30-D CAPUS Cyclopropanecarboxylic acid, 2-fluoro-3-methyl-2-phenyl-, ethyl ester, (1R, 2S, 3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

309242-57-7 CAPLUS Cyclopropanecarboxylic acid, 2-butyl-2-fluoro-, ethyl ester, (15,2R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 309242-58-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, 1,1-dimethylethylester, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

IT 309242-37-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)
(prepn. and attempted hydrolysis in presence of lipases)
RN 309242-37-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, ethyl ester,
(1R.ZS)-rel
(9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

309242-35-1 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-methyl-2-phenyl-, ethyl ester, (1R,2R,3S)-rel- (9CI) (CA INDEX NAME)

RN 309242-36-2 CAPLUS CN Cyclopropanecarboxylic acid, 2-butyl-2-fluoro-, ethyl ester, {1R,2R},-cli} (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 309242-38-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(4-chlorophenyl)-2-fluoro-, ethyl

(1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

309242-39-5 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-methyl-2-phenyl-, ethyl ester,

ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (1R,2S,3R)-rel- (9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry.

RN 309242-40-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-butyl-2-fluoro-, ethyl ester, (1R,2S)-rel-(9C1) (CA INDEX NAME)

Relative stereochemistry.

309242-47-5 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-phenyl-, ethyl ester, (1R, ZR, 3R) -rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

309242-48-6 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-3-(4-methoxyphenyl)-, ethyl (1R, 2R, 3R) - rel - (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

309242-50-0 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, ethyl ester, (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: FOR THIS

81 THERE ARE 81 CITED REFERENCES AVAILABLE RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 10 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

309242-51-1 CAPLUS Chyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, ethyl ester, (1R,2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

309242-45-3P RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation);

PREF
(Preparation); RACT (Reactant or reagent)
(prepn., crystal structure, and N-Boc-protected
fluorocyclopropylamine)
RN 309242-45-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, (1R,2R)-rel- (9CI)

INDEX NAME)

Relative stereochemistry.

309242-49-7P, (1R,2R)-2-Fluoro-2-phenylcyclopropanecarboxylic acid 309242-50-0P, (1S,2S)-Ethyl 2-fluoro-2-phenylcyclopropanecarboxylate RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

(Reactant or reagent)
(stereoselective synthesis and conversion to amide)
309242-49-7 CAPLUS

Cyclopropanecarboxylic acid, 2-fluoro-2-phenyl-, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 11 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:675087 CAPLUS
DOCUMENT NUMBER: 134:17278
TITLE: Practical and Highly Enantioselective Ring
Opening of CAPLUS Openabounds Mediated by Chaples

Cyclic Meso-Anhydrides Mediated by Cinchona

Alkaloids AUTHOR(S): L.; Bolm, Carsten; Schiffers, Ingo; Dinter, Christian

Gerlach, Arne Institut fuer Organische Chemie der RWTH Aachen, Aachen, D-52056, Germany Journal of Organic Chemistry (2000), 65 (21), CORPORATE SOURCE:

SOURCE: 6984-6991

6984-6991 CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
JOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(s): CASREACT 134:17278
AB The cinchona alkaloid-mediated opening of prochiral cyclic anhydrides in

the presence of methanol leading to optically active hemiesters is described. Very structurally diverse anhydrides are converted into

corresponding Me monoesters, and either enantiomer can be obtained

eorresponding to the control of the

reaction, the alkaloids can be recovered almost quant. and reused wi thou loss of enantioselectivity. Addnl., a catalytic protocol which

tts
the substoichiometric use of quinidine in the presence of easily
accessible pentamethylpiperidine (pempidine) is presented.
81873-49-69 91873-51-09 88335-86-89
83335-87-99

88335-87-9P RL: SPN (Synthetic preparation), PREF (Preparation) (stereoselective methanolysis of cyclic meso-anhydrides mediated by

quinine or quinidine)
81873-49-6 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, monomethyl ester,
(1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

81873-51-0 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, monomethyl ester, (15,2R)- (9CI) (CA INDEX NAME)

L7 ANSWER 11 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry. Rotation (-).

88335-86-8 CAPLUS
1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (15,2R)- (9CI)

Absolute stereochemistry. Rotation (+).

88335-87-9 CAPLUS 1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2S)- (9CI)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

THERE ARE 97 CITED REFERENCES AVAILABLE 97

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L7 ANSWER 12 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT 307964-74-5P 307964-75-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(rhodium(II)-catalyzed cyclization of amido diazo carbonyl

(rhodium(II)-catalyzed cyclization of compds.)

RN 307964-74-5 CAPLUS

CN Cyclopropanecarboxylic acid,
1-[([1,1-dimethylethyl)(phenylmethyl)amino]ca
rbonyl]- (9CI) (CA INDEX NAME)

307964-75-6 CAPLUS CN Cyclopropanecarboxylic acid, 1-[[(1,1-dimethylethyl)(phenylmethyl)amino]ca rbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: FOR THIS

THERE ARE 90 CITED REFERENCES AVAILABLE

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L7 ANSWER 12 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:663032 CAPLUS

DOCUMENT NUMBER: 133:362462

Rhodium(II)-Catalyzed Cyclization of Amido Diazo

Carbonyl Compounds Padwa, Albert; Hasegawa, Tadashi; Liu, Bing; AUTHOR (S):

Zhang,

CORPORATE SOURCE: Department of Chemistry, Emory University,

Atlanta,

GA, 30322, USA Journal of Organic Chemistry (2000), 65(21), SOURCE: 7124-7133

CODEN: JOCEAH; ISSN: 0022-3263 PUBLISHER: American Chemical Society

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):

English CASREACT 133:362462

A series of acyclic diazo keto amides were prepd. from N-benzoyl-N-alkylaminopropanoic acids and were treated with a catalytic

amt. of rhodium(II) acetate. The resultant carbenoids underwent

cyclization onto the neighboring amide carbonyl oxygen atom to generate

yenerate seven-membered carbonyl ylide dipoles. Subsequent collapse of the dipoles

alpoles with charge dissipation produce bicyclic epoxides which undergo further

recoganization to give substituted 5-hydroxydihydropyridones in good yield. Depending on the nature of the substituent groups, it was possible to trap some of the initially formed carbonyl ylide dipoles with a reactive dipolarophile such as DMAD. In other cases, cyclization of

dipole to the epoxide is much faster than bimol. trapping. A related cyclization/rearrangement sequence occurred when diazo keto amides derived

from the cyclic pyrrolidone and piperidone ring systems were

not require special precautions. The overall procedure represents an efficient one-pot approach toward the synthesis of various indolization and quinolizatine ring systems.

II 11302-21-6

113020-21-6
RL: RCT (Reactant), RACT (Reactant or reagent)
(rhodium(II)-catalyzed cyclization of amido diazo carbonyl compds.)
113020-21-6 CAPLUS
1,1-Cyclopropanedicarboxylic acid, monomethyl ester (9CI) (CA INDEX

L7 ANSWER 13 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:556471 CAPLUS
DOCUMENT NUMBER: 133:281391
TITLE: Rhodium(II)-Catalyzed Equilibration of Push-Pull
Carbonyl and Ammonium Ylides. A Computationally

Understanding of the Reaction Pathway Padwa, Albert; Snyder, James P.; Curtis, Erin A.; Sheehan, Scott M.; Worsencroft, Kimberly J.; AUTHOR (S):

Kappe, C.

Oliver Department of Chemistry, Emory University, CORPORATE SOURCE: Atlanta,

Atlanta,

GA, 30322, USA

SOURCE:

Journal of the American Chemical Society (2000),
122(34), 8155-8167

CODEN: JACSAT, ISSN: 0002-7863

FUBLISHER:
American Chemical Society
Journal
LANGUAGE:
English
AB alpha-Diazo esters contg. an amido group in the .gamma.-position
have

been found to undergo a rhodium(II)-catalyzed transformation,

producing
five-membered ammonium or carbonyl ylides depending on the reaction
conditions used. In the absence of an external dipolarophile,
ammonium

ylides are the exclusive products formed. In most cases these ylides cannot be isolated as they readily undergo sigmatropic rearrangement

fragmentation reactions. In the presence of typical dipolar philes

as DMAD or N-phenylmaleimide, cycloaddn. products derived from cyclic carbonyl ylide dipoles are formed as the major products. The rhodium carbenoid intermediate generated in these reactions can either attack

lone pair of electrons on the amide nitrogen (ammonium ylide formation) or

ation) or the lone pair of electrons on the carbonyl oxygen (carbonyl ylide formation). The exptl. observations reflect a catalyst-promoted system of equil. with a clear-out thermodn. bias. To examine the underlying mechanism in detail, d. functional theory (DFT) calons.

performed on all plausible intermediates, including the full dirhodium tetracarboxylate functionality. A semiquant. energy manifold is

(Process); RACT (Reactant or reagent) (study on the reaction pathway of the rhodium(II)-catalyzed equilibration of push-pull carbonyl and ammonium ylides) 3697-66-3 CAPLUS

RN 3697-66-3 CAPLUS CN 1,1-Cyclopropanedicarboxylic acid, monoethyl ester (8CI, 9CI) (CA INDEX

ΙT

299204-32-3P 299204-33-4P 299204-36-7P 299204-37-8P 299204-41-4P 299204-42-5P RL: PEF (Physical, engineering or chemical process); RCT (Reactant);

SFN

(Synthetic preparation); PREP (Preparation); PROC (Process); RACT
(Reactant or reagent)
(study on the reaction pathway of the rhodium(II)-catalyzed
equilibration of push-pull carbonyl and ammonium ylides)
RN 299204-32-3 CAPLUS
CN Cyclopropanecarboxylic acid,
1-[[methyl(phenylmethyl)amino] carbonyl]-,
ethyl ester (9CI) (CA INDEX NAME)

299204-33-4 CAPLUS Cyclopropanecarboxylic acid, 1-[[methyl(phenylmethyl)amino]carbonyl]-(9CI) (CA INDEX NAME)

299204-36-7 CAPLUS Cyclopropanecarboxylic acid, 1-[(diethylamino)carbonyl]-, ethyl ester (9C1) (CA INDEX NAME)

L7 ANSWER 13 OF 139 CAPLUS COPYRIGHT 2002 ACS FORMAT (Continued) L7 ANSWER 13 OF 139 CAPLUS COPYRIGHT 2002 ACS

RN 299204-37-8 CAPLUS CN Cyclopropanecarboxylic acid, 1-[(diethylamino)carbonyl]- (9CI) (CA INDEX NAME)

(Continued)

299204-41-4 CAPLUS Cyclopropanecarboxylic acid, 1-[{methylphenylamino}carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

299204-42-5 CAPLUS Cyclopropanecarboxylic acid, 1-[(methylphenylamino)carbonyl]- (9CI) INDEX NAME)

THERE ARE 108 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFERENCE COUNT: 108

L7 ANSWER 14 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:770730 CAPLUS DOCUMENT NUMBER: 132:122316 Transition Terminal Property of the Property of Transition Terminal Property of Terminal Property of

132:122316
Transition metal-catalyzed [5+2]-cycloadditions of 2-substituted-l-vinylcyclopropanes: Catalyst control and reversal of regioselectivity Wender, Paul A.; Dyckman, Alaric J.
Department of Chemistry, Stanford University, Stanford, CA, 94305-5080, USA
Organic Letters (1999), 1(13), 2089-2092
CODEN: ORLEF7; ISSN: 1523-7060
American Chemical Society
Journal
English AUTHOR(S): CORPORATE SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI English CASREACT 132:122316

AB Studies on the stereo- and regioselectivity of rhodium(I)-catalyzed [5+2]-cycloaddns. of 2-substituted-1-vinylcyclopropanes, e.g. I (R = CHZOM, CHZOAC, CHZOAC, COZM, COZMe) were described. The relative stereochem. of vicinal cyclopropane substituents is conserved in these reactions, translating into distinct 1,4- or 1,5-stereorelationships in the cycloadducts. Exceptional regioselectivity in cyclopropane bond

bond

cleavage and even reversal of cleavage selectivity can be obtained

cleavage and even resource.

through
judicious selection of substituents and/or catalyst. Thus,
cycloaddn. of I (R = CO2Me) in toluene contg. Nh(PPh3)3(O2CCF3) at
110.degree. for one hour gave 81% of a 20:1 mixt. of
hexahydroazulenetricarboxylates II and III whereas cycloaddn. of I (R

CO2Me) in the presence of [Rh(CO)2Cl]2 gave 93% of a 1:11 mixt. of II and III.

ANSWER 14 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 256463-07-79 256463-08-09 256463-20-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)
(prepn. of methylhexahydroazulenecarboxylates by rhodium
complex-catalyzed regioselective/stereoselective cycloaddns. of
[[methoxycarbonyl] octenynyl] (yclopropanes)
256463-07-7 CAFLUS
Propanedioia acid, 2-butynyl[(2E)-3-[(1R,2S)-2-carboxycyclopropyl]-2propenyl]-, 1,3-dimethyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

256463-08-8 CAPLUS
Propanedioic acid, 2-butynyl[(2E)-3-[(1R,25)-2-(methoxycarbonyl)cyclopropyl]-2-propenyl]-, dimethyl ester, rel-

(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

256463-20-4 CAPLUS
Propanedioic acid, 2-butynyl[(2E)-3-[{1R,2R})-2(methoxycarbonyl)cyclopropyl]-2-propenyl]-, dimethyl ester, rel-(9CI)

(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE 287 Al 19991110 EP 1999-303549 19990506 AT, BE, CH, DE, DX, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, EP 955287 PT. IE, SI, LT, LV, FI, RO
074 A 20000606
152 A 19991117
026368 A2 20000125 US 6072074 CN 1235152 JP 2000026368 US 1999-304838 CN 1999-107522 JP 1999-125740 PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI JP 1998-126025 CASREACT 131:310403; MARPAT 131:310403

AB Trans-3-(1-propynyl)-2,2-dimethylcyclopropanecarboxylate compds. (I; R =

H, C1-4 alkyl) (e.g., R = Et), which are useful agrochem.

intermediates, are readily prepd. in high yield and selectivity by the intramol. cyclocondensation of ROZCCHZC(CH3) 2CHClCHZCC12CH3 with base (e.g.,

c),
and I can be stereoselectively hydrogenated with the Lindlar
catalyst to the corresponding trans-3-(2)-(1-propenyl)-2,2dimethylcyclopropanecarboxylate compds. (II; e.g., R = Et).
247920-98-59 247920-99-69
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

L7 ANSWER 14 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

REFERENCE COUNT:

THERE ARE 14 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 15 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (Reactant or reagent)
(prepn. of trans-3-(1-propynyl)-2,2-dimethylcyclopropanecarboxylate
compds. and their derivs.)
247920-98-5 CaPLUS
(Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1-propynyl)-, ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

247920-99-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1Z)-1-propenyl-, ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown

247921-00-2P

IT 247921-00-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of trans-3-(1-propynyl)-2,2-dimethylcyclopropanecarboxylate compds. and their derivs.)
RN 247921-00-2 CAPLUS
CN cyclopropanecarboxylic acid, 2,2-dimethyl-3-(12)-1-propenyl-, (1R,3R)-rel-

(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

REFERENCE COUNT: THIS

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR L7 ANSWER 15 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) RECORD. ALL CITATIONS AVAILABLE IN THE RE

L7 ANSWER 16 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Ph S OEt

RN 946-39-4 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry

RN 5682-61-1 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1R,2S)-rel(9CI)
(CA INDEX NAME)

Relative stereochemistry.

RN 23020-15-7 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 249500-35-6 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, 1-methylethyl ester, (1R, ZR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 16 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:593598 CAPLUS
DOCUMENT NUMBER: 131:336754
CITILE: Catalytic asymmetric cyclopropanation using a new chiral .beta.-diketone Cu(II) complex as a catalyst

AUTHOR(S): Xu, Yu, Wang, Zhong Yi, You, Tian Pa
CORPORATE SOURCE: Department of Chemistry, University of Science and Technology of China, Mefei, 230026, Peop. Rep.
China CODEN: CCLEET; ISSN: 1001-8417
PUBLISHER: Springer-Verlag Singapore Pte. Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:336754
AB A new chiral .beta.-diketone Cu(II) catalyst was synthesized and used for the asym. cyclopropanation of styrene with diazo esters. A high optical yield (.apprx.904) was achieved. The effect of the structure of substrate on the enantioselectivity was studied. Both chem. yield and optical yield were reduced when the steric bulky substrate was employed.
IT 5861-31-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(asym. cyclopropanation catalyzed by chiral .beta.-diketone Cu(II) complex)
CN (Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1R, 2R)-rel(SCI)
(CA INDEX NAME)

Relative stereochemistry.

T 946-38-3P 946-39-4P 5682-61-1P
23020-15-7P 249580-35-6P 249580-36-7P
RL: SPN (Synthetic preparation), PREP (Preparation)
(asym. cyclopropanation catalyzed by chiral .beta.-diketone Cu(II)
complex)
N 946-38-3 CAPLUS
N Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)-relGCA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 16 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 249500-36-7 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, 1-methylethyl ester, (1R,2S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L7 ANSWER 17 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:162346 CAPLUS DOCUMENT NUMBER: 130:224602 DOCUMENT NUMBER: TITLE: 130:224602
Process and Catalysts for the preparation of lower alkyl cyclopropanecarboxylate esters Kaufhold, Manfred: Feld, Marcel Huels A.-G., Germany Ger. Offen., 4 pp. CODEN: GWXXEX INVENTOR (S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. APPLICATION NO. DATE KIND DATE DE 19738072 A1 19990304 DE 1997-19738072 19970901 EP 900777 A1 19990310 EP 1998-113771 19980723 EP 900777 B1 20020410 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 11152250 A2 19990608 JP 1998-245037 19980831
PRIORITY APPLM. INFO:. DE 1997-19738072 A 19970901
AB Lower alkyl cyclopropanecarboxylate esters (e.g., Et cyclopropanecarboxylate) are prepd. in high yield and selectivity by esterification of a stoichiometric excess of cyclopropanecarboxylic to a lower alkanol in an esterification zone at 100-200.degree. in presence of an acid esterification catalyst (e.g., alkylbenzenesulfonic acids) with distn. of the reaction water and small l
quantity of alc. from the reaction zone.
1759-53-1DP, Cyclopropanecarboxylic acid, lower alkyl esters
2868-37-39, Methyl cyclopropanecarboxylate 4606-07-5P,
Ethyl cyclopropanecarboxylate 60128-01-0P
RL: IHF (Industrial manufacture); PREF (Preparation)
(process and catalysts for the prepn. of lower alkyl
cyclopropanecarboxylate esters)
1759-53-1 CAPLUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Д со2н

2868-37-3 CAPLUS Cyclopropanecarboxylic acid, methyl ester (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 18 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:74169 CAPLUS
DOCUMENT NUMBER: 128:127594
Highly Enantioselective Ring Opening of Cyclic TITLE: Anhydrides to Isopropyl Hemiesters with Ti-TADDOLates: An Alternative to Hydrolytic Enzymes? Jaeschke, Georg, Seebach, Dieter Laboratorium fuer Organische Chemie, AUTHOR (5): CORPORATE SOURCE: Eidgenoessische Hochschule ETH-Zentrum, Zurich, CH-8092, Switz. Journal of Organic Chemistry (1998), 63(4), SOURCE: 1190-1197 CODEN: JOCEAH; ISSN: 0022-3263 American Chemical Society PUBLISHER: DOCUMENT TYPE: UAGE: English
The Lewis acid mediated transfer of an alkoxide ligand from the LANGUAGE: chiral ligand sphere of Ti-TADDOLate (1) to cyclic meso anhydrides to afford the corresponding hemiesters is described. By using this method a variety of

structurally different anhydrides can be converted to iso-Pr hemiesters with high enantioselectivities (enantiomer ratios up to 99:1). We

have also investigated Lewis acidic titanium complexes which differ from 1 in

the chiral ligand or the alkoxide ligand that is transferred. Finally, Finally, a catalytic version, which allows the substoichiometric use of Ti-TADDOLate

ADDOLate
in the presence of stoichiometric amts. of Al(Oi-Pr)3, is presented.
201615-26-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(asym. ring opening of meso anhydrides to iso-Pr hemiesters with
Ti-TANDOLates)
201815-26-1 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, mono(1-methylethyl)
ester, cis-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

L7 ANSWER 17 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

4606-07-9 CAPLUS Cyclopropanecarboxylic acid, ethyl ester (6CI, 7CI, 8CI, 9CI) (CA NAME)

60128-01-0 CAPLUS Cyclopropanecarboxylic acid, propyl ester (9CI) (CA INDEX NAME)

1759-53-1, Cyclopropanecarboxylic acid
RL: RCT (Reactant), RACT (Reactant or reagent)
(process and catalysts for the prepn. of lower alkyl
cyclopropanecarboxylate esters)
1759-53-1 CAPLUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:218556 CAPLUS DOCUMENT NUMBER: 126:211727

DOCUMENT NUMBER: TITLE:

126:211727
Investigation of the Effects of the Structure and Chelate Size of Bis-oxazoline Ligands in the Asymmetric Copper-Catalyzed Cyclopropanation of Olefins: Design of a New Class of Ligands Bedekar, Ashutosh V.; Koroleva, Elise B.;

CORPORATE SOURCE:

Pher G. Department of Organic Chemistry Institute of Chemistry, Uppsala University, Uppsala, S-75121,

Swed. SOURCE: 2518-2526 Journal of Organic Chemistry (1997), 62(8),

CODEN: JOCEAH; ISSN: 0022-3263 American Chemical Society Journal English PUBLISHER: DOCUMENT TYPE: LANGUAGE: GI

A set of novel, C2-sym. bis-oxazoline ligands have been synthesized by mounting two oxazoline rings onto an optically active 1,3-dioxolane backbone. This design allows for the control of both orientation as well

as the proximity of the oxazolinyl R-groups around the reactive site.

Аs a result of the twist imparted by the 1,3-dioxolane ring, the

owazolinyl substituents can be brought either toward or away from the complexed metal in a controllable fashion. Starting from L-amino

and either L- or D-tartaric acid, two sets of ligands: (I; R1 = benzvl

yl, i-Pr, t-Bu, sec-Bu, R2 = H and II; R1 = i-Pr, t-Bu, R2 = H) were synthesized and evaluated in the copper-catalyzed cyclopropanation of olefins. The comparison of benzyl and iso-Pr derivs. of these ligands with previously reported five- and six-membered bis-oxazolines clearly indicates the beneficiary effect of the larger chelate size and the chiral

tether of the tartrate-derived ligand. The effect of the different oxazolinyl groups along with the different substituents on the

tethers was also investigated. The influence of the alkyl group of

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) diazoacetate was studied, and the diazoacetate derived from (-)-8-phenylmenthol was found to be superior to (-)-menthyl diazoacetate.

The cyclopropanation of vinyl acetate, a relatively unexplored substrate

for this reaction, furnished cyclopropanol derivs. in good optical

for this reaction, furnished cyclopropanol derivs. in good optical purity.

IT 141694-54-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(60% ee; effects of the structure and chelate size of bis-coxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 141694-54-4 CAPIUS
CN Cyclopropanecarboxylic acid, 2-(acetyloxy)-, ethyl ester,
(1R, 2S)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 141694-55-5P
RL: SPN (Synthetic preparation); PREF (Preparation)
(644 ee, effects of the structure and chelate size of
bis-oxacoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 141694-55-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(acetyloxy)-, ethyl ester,
(1R, ZR)-rel{9CI} (CA INDEX NAME)

Relative stereochemistry.

188052-75-7P

IT 188052-73-78
RL: SPN (Synthetic preparation); PREP (Preparation)
74% de; effects of the structure and chelate size of
bis-cxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 188052-75-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(acetyloxy)-, 5-methyl-2-(1methylethyl) cyclohexyl ester,
[1R-[1.alpha.[1R\*, 2R\*, 2.beta., 5.alpha.]](9CI) (CA INDEX NAME)

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS

Relative stereochemistry.

67489-30-9P 67528-67-0P

SFN (Synthetic preparation); PREP (Preparation) (89% de; effects of the structure and chelate size of

(894 de; effects of the structs and bis-oxazoline ligands in the asym. copper-catalyzed cyclopropanation of olefins) RN 67489-30-9 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, (1R, 2S, 5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R, 2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

67528-67-0 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RL: SPN (Synthetic preparation); PREP (Preparation) (91% de; effects of the structure and chelate size of

bis-oxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 180185-09-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, 5-methyl-2-(1-methyl-1phenylethyl) cyclohexyl ester,
[1R-[1.alpha.[1R\*, 25\*), 2.beta., 5.alpha.]][9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
Absolute stereochemistry.

RL: SPN (Synthetic preparation), PREP (Preparation) (84% ee) effects of the structure and chelate size of bis-oxazoline ligands in the asym. copper-catalyzed cyclopropanation of olefins) 96426-88-9 CAPLUS

96426-88-9 CAPLUS COVICION (CAPLUS AND (1, 2, 1, 1-dimethylethyl ester, (1R, 2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 188052-76-8P
RL: SPM (Synthetic preparation); PREP (Preparation)
(88% de: effects of the structure and chelate size of bis-oxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 188052-76-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(acetyloxy)-, 5-methyl-2-(1methylethyl)cyclohexyl ester,
[IR-[1.alpha.(IR\*,255),2.beta.,5.alpha.]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

939-90-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(88% es; effects of the structure and chelate size of bis-oxazoline
ligands in the asym. copper-catalyzed cyclopropanation of olefins)
939-90-2 CAPLUS
939-90-2 (CAPLUS)
939-90-2 (CAPLUS)
939-90-2 (CAPLUS)
939-90-2 (CAPLUS) clopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX

ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

180036-70-8P

IT 180036-70-8P
RL: SRN (Synthetic preparation); PREP (Preparation)
[964 de: effects of the structure and chelate size of bis-oxazoline ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 180036-70-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, 5-methyl-2-(1-methyl-1-phenylethyl) cyclohexyl ester,
[1R-[1.alpha.(lR\*, 2R\*), 2.beta., 5.alpha.]][9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 97-71-2P 34702-97-1P 34716-60-4P
RL: PNU (Preparation, unclassified); PREP (Preparation) (effects of the structure and chelate size of bis-oxazoline ligands in

nds in the asym. copper-catalyzed cyclopropanation of olefins) 97-71-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester (7CI, 8CI, 9CI)

INDEX NAME)

RN 34702-97-1 CAPLUS

ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (-).

34716-60-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, {1R,2R}- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 53692-74-3P 132098-61-4P 180036-71-9P
188052-74-5P
RL: SPN (Synthetic preparation), PREP (Preparation)
(effects of the structure and chelate size of bis-cxazoline
ligands in
the asym. copper-catalyzed cyclopropanation of olefins)
RN 53692-74-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-diphenyl-, (R)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry. Rotation (-).

RN 132098-61-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, 5-methyl-2-(1-methylethyl) cyclohexyl ester,
[IR-[1.alpha, (IR\*, 2R\*), 2. beta., 5. alpha.]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 19 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

180036-71-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl-, 1,1-dimethylethyl ester, RN CN (1R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 188052-74-6 CAPLUS
CN Cyclopropaecarboxylic acid, 2-methyl-2-phenyl-, 5-methyl-2-(1-methylethyl)cyclohexyl ester,
[IR-[1.alpha.(IR\*,25\*),2.beta.,5.alpha.]](SCI) (CA INDEX NAME)

Absolute stereochemistry.

IT 5279-78-7P
RL: SPN (Synthetic preparation); PREF (Preparation)
(the acid is 88% ese effects of the structure and chelate size of bis-cwazoline ligands in the asym. copper-catalyzed cyclopropanation of olefins)
RN 5279-78-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 20 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:186323 CAPLUS DOCUMENT NUMBER: 126:185892 TITLE: Preparation of .alpha.-cg

Preparation of .alpha.-cyanobenzyl esters from acyl

halides, phenoxybenzaldehyde, and metal cyanides Kanechika, Tatsuo, Uehara, Toshiki Sumitomo Chemical Co, Japan Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKCKAF INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

Patent

Japanese 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE

A2 19970107 JP 1995-154524 19950621
CASTRACT 126:185892; MARPAT 126:185892 PATENT NO. JP 09003029 OTHER SOURCE(S):

AB The title esters I (R = Q, Q1, Q2, Q3; R1-8 = H, linear or branched lower alkyl; X1 = halo) are prepd. by treatment of RCOX (R = same as above; X =

halo) with 3-PhOC6H4CHO (II) and alkali metal or alk. earth metal

ides
in a two-phase solvent composed of inert org. solvents and H2O in the
presence of phase-transfer catalysts and R9CO2H (R9 = same as R
or C6H4OPh-3). A toluene soln. of II and 3-PhOC6H4CO2H (III) was added

dropwise to an aq. soln. of NaCN and PhCH2Et3N+ Cl- at 5.degree..

L7 ANSWER 20 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Subsequently a toluene soln. of 2,2,3,3-tetramethylcyclopropanecarbonyl chloride was added dropwise to the above reaction mixt. while continuing the addn. of the first soln. and the mixt. was further stirred for 1

after the finish of addn. of both solns. to give 99.8% 3-phenoxy-.alpha.-cyanobenzyl 3,3-tetramethylcyclopropanecarboxylate with purity 95.5%, vs. 97.0 and 84.9%, resp., for a control reaction

using

g
no III.
39515-41-89
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
(Preparation)
(prepn. of phenoxy-alpha.-cyanobenzyl esters from acyl halides,
phenoxybenzaldehyde, and metal cyanides in presence of carboxylic
acida)

acids)
39515-41-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

15641-58-4, 2,2,3-3-Tetramethylcyclopropanecarboxylic acid
RL: RCT (Reactant), RACT (Reactant or reagent)
(prepn. of phenoxy-.alpha-cyanobenzyl esters from acyl halides,
phenoxybenzaldehyde, and metal cyanides in presence of carboxylic
acids)
15641-58-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6CI, 8CI, 9CI) INDEX NAME)

ANSWER 21 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (syntheses of (carboxycyclopropyl)glycine analogs and their characterization to ionotropic glutamate receptors) 117857-96-2 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.s,1R,2S)-

(9CT)

(CA INDEX NAME) Absolute stereochemistry.

185041-29-6 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-3-ethenyl-, [1R-[1.alpha.(S\*),2.alpha.,3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

185041-32-1 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-3-ethyl-, [1R-[1.alpha.(S\*),2.alpha.,3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

185041-58-1P 185041-60-5P 185041-61-6P 185041-62-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); (Reactant or reagent)

ANSWER 21 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1996:673288 CAPLUS MENT NUMBER: 126:47527 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE: Syntheses of trans-3'-substituted-CCG-IV analogs

their characterization to ionotropic glutamate

receptors Shimamoto, Keiko; Shigen, Yasushi; Nakajima, AUTHOR (S): Terumi: Yumoto, Noboru; Yoshikawa, Susumu; Ohfune,

Yasufumi Suntory Inst. Bioorganic Res., Mishima, 618, Japan Bioorganic & Medicinal Chemistry Letters (1996), 6(20), 2381-2386 CODEN: BMCLE8; ISSN: 0960-894X Elsevier CORPORATE SOURCE: SOURCE:

CODEN: BMCLE8; ISSN: USOU-OFFA

Elsevier

DCCUMENT TYPE: Journal
LANGUAGE: Bmglish

AB Trans-3'-substituted-CCG-IV analogs [CCG-IV is (2-carboxycyclopropyl) glycine, the substituent is Et or ethenyl) were efficiently synthesized via an intramol. cycloaddn. of a diazoacetamide

using a chiral rhodium catalyst. These analogs evoked marked depolarization through ionotropic glutamate receptors on the spinal motoneurons or the kainate-sensitive dorsal root C-fiber of new born rats

even though their binding affinities for the receptors on rat brain synaptic membranes were relatively low. These results suggest that

depolarizing action on C-fiber is not caused by the activation of

kainate
high affinity sites.
IT 135558-96-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

(Biological study, unclassified); BIOL (Biological study) (syntheses of (carboxycyclopropyl)glycine analogs and their characterization to ionotropic glutamate receptors) RN 135658-96-7 CAPLUS CN Cyclopropaneacetic acid, alpha.-amino-2-carboxy-3-[(phenylmethoxy)methyl]-, [1R-[1.alpha.(S\*),2.alpha.,3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

117857-96-2DP, derivs. 185041-29-6P 185041-32-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological

ANSWER 21 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (syntheses of (carboxycyclopropyl)glycine analogs and their characterization to ionotropic glutamate receptors) 185041-58-1 CAPLUS Cyclopropanecarboxylic acid, [[(1,1-dimethylethoxy)carbonyl]amino]-2-[[(1,1-dimethylethoxy)carbonyl]amino]-3-ethenyl-, methyl

ester, [15-[1.alpha., 2.alpha.(R\*), 3.beta.]] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

185041-60-5 CAPLUS
Cyclopropaneacetic acid,
pha.-[[(1,1-dimethylethoxy)carbonyl]amino]-2ethenyl-3-(methoxycarbonyl)-, methyl ester, [1R[1.alpha.(S\*),2.beta.,3.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185041-61-6 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethylsilyl]oxylethyl]-3-ethyl-, methyl ester,
[1S-[1.alpha.,2.alpha.(R\*),3.beta.]]- (9CI) (CA INDEX NAME)

ANSWER 21 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$\begin{array}{c} \text{Ket} \\ \text{NeO} \\ \text{S} \\ \text{R} \\ \text{NeO} \\ \text{OBu-t} \\ \end{array}$$

RN 185041-62-7 CAPLUS
CN Cyclopropaneacetic acid,
.alpha.-[[(1,1-d.imethylethoxy)carbonyl]amino]-2ethyl-3-(methoxycarbonyl)-, methyl ester, [1r[1.alpha.(S\*),2.beta.,3.alpha.]}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) and pentane as solvent also enhanced the enantioselectivity of the process. The synthetic utility of this chem. was illustrated by its application to the synthesis of all four stereoisomers of l-amino-2-phenylcyclopropanecarboxylic acid. The occurrence of the hly highly

y stereoselective cyclopropanations was rationalized by a model in which the

i the ligands were considered to adopt a D2 sym. arrangement. The

tetrakis[.mu.-[1-[(4-dodecylphenyl)sulfonyl]-L-prolinato-02:02']]dirhodium

catalyzed cyclopropanation of 2-diazo-4-phenyl-3-butenoic acid  ${\tt Me}$ 

ester
with styrene gave [1S-[1.alpha.,1(E),2.beta.]]-2-phenyl-1-(2-phenylethenyl) cyclopropanecarboxylic acid Me ester (I). I was

into (15-cis)-1-amino-2-phenylcyclopropanecarboxylic acid

into (18-cis)-1-amino-2-phenylcyclopropanecarboxylic acid hydrochloride
(II) and (1R-trans)-1-amino-2-phenylcyclopropanecarboxylic acid hydrochloride (III).

IT 153062-73-89 158800-59-0P 158800-60-3P 18032-77-4P

RE: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (preps. of cyclopropanecarboxylates by rhodium (arylsuslfonyl)prolinate-catalyzed asym. cyclopropanation of vinyldiazomethanes with

(arylavulfonyl)prolinatecatalyzed asym. cyclopropanation of vinyldiazomethanes with alkenes)
RN 153062-73-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-1-[(1E)-2-phenylethenyl]-, methyl
ester, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 158800-59-0 CAPLUS CN 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, monomethyl ester, (1S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996: 394106 CAPLUS
DOCUMENT NUMBER: 125:167460
TITLE: ASYMMAPTIC CAPLUS

Asymmetric Cyclopropanations by Rhodium(II) N-(Arylsulfonyl)prolinate Catalyzed Decomposition

٥f

Vinyldiazomethanes in the Presence of Alkenes. Practical Enantioselective Synthesis of the Four Stereoisomers of 1-Amino-2-phenylcyclopropanearboxylic acid Davies, Huw M. L.; Bruzinski, Paul; Hutcheson,

AUTHOR (S):

K.; Kong, Norman; Fall, Michael J. Department of Chemistry, State University of New CORPORATE SOURCE:

Buffalo, NY, 14260-3000, USA J. Am. Chem. Soc. (1996), 118(29), 6897-6907 CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

Journal English CASREACT 125:167480

AB The rhodium N-(arylsulfonyl)prolinate catalyzed decompn. of vinyldiazomethanes in the presence of alkenes yielded a very general method for the synthesis of functionalized cyclopropanes in a highly disastereoselectives and enantioselective mode. A detailed study was undertaken to det. the key factors that control the enantioselectivity of this process. The highest levels of enantioselectivity were obtained using cyclic N-(arylsulfonyl)amino acids as ligands for the dirhodium catalyst, and the optimized catalyst was tetrakis[N-[(4-doderylhenyl)sulfonyl]-[(L)-prolinato]dirhodium. The carbenoid structure had a crit. effect on the degree of asym. induction,

carpending structure has a crist willow and the combination of a small electron-withdrawing group such as a Me ester and an electron-donating group such as vinyl or Ph resulted in

highest levels of enantioselectivity. The use of electron neutral alkene

ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 158800-60-3 CAPLUS (1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, dimethyl ester, (s)-

(CA INDEX NAME)

Absolute stereochemistry.

180322-77-4 CAPLUS 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, monomethyl ester, (lR-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

72397-56-9P 128700-57-2P 154841-83-5P 154841-84-6P 154941-85-7P 154941-86-6P 1549641-93-2-2P 180193-33-3P 154965-99-9P 180193-22-P 180322-81-0P 180322-82-1P 180322-83-2P 180322-84-3P 180322-88-6

180322-9;-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of cyclopropanecarboxylates by rhodium
(arylsulfonyl)prolinatecatalyzed asym. cyclopropanation of vinyldiazomethanes with

alkenes) 72397-56-9 CAPLUS

RN 72397-56-9 CAPIUS CN 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, dimethyl ester, (R)-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 128700-57-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-1-[(1E)-2-phenylethenyl]-,
methyl .... ester, (1R, 2R) - rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

154841-83-5 CAPLUS Cyclopropanecarboxylic acid, 2-(acetyloxy)-1-(2-phenylethenyl)-, methyl ester, [1.alpha.,1(E),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

154841-84-6 CAPLUS Cyclopropanecarboxylic acid, 2-butyl-1-(2-phenylethenyl)-, methyl ester, [1.alpha.,1(E),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

154841-85-7 CAPLUS Cyclopropanecarboxylic acid, 2-ethyl-1-(2-phenylethenyl)-, methyl [1.alpha.,1(E),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

L7 ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS Double bond geometry as shown.

180322-75-2 CAPLUS Cyclopropanecarboxylic acid, 2-(4-chlorophenyl)-1-(2-phenylethenyl)-, methyl ester, [1S-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

180322-76-3 CAPLUS No. Coloropanecarboxylic acid,
2-(4-methoxyphenyl)-1-(2-phenylethenyl)-,
methyl ester, [15-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 180322-81-0 CARLOUS CN Cyclopropanecarboxylic acid, 2-phenyr-, cseter, [1S-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME) 180322-81-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, ethyl

Absolute stereochemistry.
Double bond geometry as shown.

ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

154841-86-8 CAPLUS Cyclopropanecaroxylic acid, 2-(1-methylethyl)-1-(2-phenylethenyl)-, methyl ester, [1.alpha.,1(E),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry. Double bond geometry as shown.

154966-39-9 CAPLUS Cyclopropanecarboxylic acid, 2-ethoxy-1-(2-phenylethenyl)-, methyl ester, [1.alpha.,1(E),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry. Double bond geometry as shown.

180193-32-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-1-{2-phenylethenyl}-, methyl ester, (E)- {9CI} (CA INDEX NAME)

Double bond geometry as shown.

180193-33-3 CAPLUS Cyclopropanecarboxylic acid, 2,3-dimethyl-1-(2-phenylethenyl)-, methyl ester, [1.alpha.,1(E),2.beta.,3.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

180322-82-1 CAPLUS Cyclopropanecarboxylic scid, 2-phenyl-1-(2-phenylethenyl)-, ethylethyl ester, [1S-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

180322-83-2 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-1-{2-phenylethenyl}-,
1,1-dimethylethyl ester, [1S-[1.alpha.,1{E},2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

180322-84-3 CAPLUS 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, monomethyl ester, (15-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 180322 C CN 1,1-Cyclopropause (1R-cis)-(9CI) (CA INDEX NAME) 180322-87-6 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-phenyl-, monomethyl ester, L7 ANSWER 22 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

L7 ANSWER 23 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 178033-28-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-acetyl-, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

ANSWER 23 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1996:315725 CAPLUS MENT NUMBER: 125:58630 ACCESSION NUMBER:

DOCUMENT NUMBER:

TITLE:

123:39630 Asymmetric [2 + 1] Cycloaddition Reactions of 1-Seleno-2-silylethene Yamazaki, Shokor Tanaka, Mayumir Yamabe, Shinichi Department of Chemistry, Nara University of AUTHOR (S): CORPORATE SOURCE: Education.

Nara, 630, Japan J. Org. Chem. (1996), 61(12), 4046-4050 CODEN: JOCEAH; ISSN: 0022-3263 Journal English CASREACT 125:58630 SOURCE:

DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

Ac CH(SePh) (SiMe3) I

AB The reaction of (E)-1-(phenylseleno)-2-(trimethylsilyl)ethene (1) and vinyl ketones, e.g., CH2:CH3c, in the presence of a chiral Lewis acid prepd, from Ticl4, Ti(0iPr)4, (R)- or (5)-1,1"-binaphthol (BNOL), and mol. sieve M54A gave enantiomerically enriched cis cyclopropane

moi. Sieve MS4A gave enantiomerically enriched cis cyclopropane products, e.g., I (3a). The enantiomeric excess and chem. yield varied depending on the ratio of TiCl4 and Ti(OiPr)4 to 1. Reproducible results (43-47% ee/33-41% yields) for 3a were obtained using 1.1 equiv of TiCl4, 0.54-0.65

equiv of Ti(OiPr)4, and 1.65 equiv of BINOL. The obsd.

equiv of Ti(OiPr)4, and 1.65 equiv of BINOL. The obsd.
enantics=lectivity
was explained by consideration of the structure of the postulated
intermediates, alkoxy Ti-carbonyl complexes, via ab initio MO calcns.
IT 178033-26-69 178033-28-8P
RE: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective cycloaddn. reaction of selenosilylethene with
vinyl

ketones to give ciscurclenrowses)

vinyl
ketones to give cis-cyclopropanes)
RN 178033-26-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2-acetyl-, methyl ester, (1R-cis)- (9CI)
(CA
INDEX NAME)

Absolute stereochemistry. Rotation (-).

L7 ANSWER 24 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1996:181373 CAPLUS DOCUMENT NUMBER: 124:342187

DOCUMENT NUMBER: TITLE: Lipase-catalyzed resolution of chiral acids or

alcohols using mixed carboxylic-carbonic

anhydrides AUTHOR(S):

Guibe-Jampel, Eryka; Chalecki, Zbigniew; Bassir, Mohamed; Gelo-Pujic, Mirjana Lab. Reactions Selectives Supports, Univ. CORPORATE SOURCE:

Paris-Sud,

SOURCE:

Orsay, 91405, Fr.
Tetrahedron (1996), 52(12), 4397-402
CODEN: TETRAB; ISSN: 0040-4020
Journal
English

DOCUMENT TYPE: Journal
LANGUAGE: English

Mixed carboxylic-carbonic anhydrides are efficient irreversible acyl
transfer reagents for lipase catalyzed esterification in org. media

d
can be used for the resoln. of chiral carboxylic acids or alcs.
1447-14-9P
RL: BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation)
(lipase-catalyzed resoln. of chiral acids or alcs. using mixed carboxylic-carbonic anhydrides)
1447-14-9 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl- (6CI, 7CI, 8CI, 1)

(CA INDEX NAME)

176438-82-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (lipase-catalyzed resoln of chiral acids or alcs. using mixed carboxylic-carbonic anhydrides)
176438-82-7 CAPIUS
Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, anhydride with 2-methylpropyl hydrogen carbonate (9CI) (CA INDEX NAME)

ANSWER 25 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1995:898887 CAPLUS MENT NUMBER: 123:313432 123:313432
Preparation of 2-fluorocyclopropanemethanol and 2-fluorocyclopropanecarboxylic acid
Yukimoto, Jusuke; Ehata, Tsutomu; Tojo, Toshiaki;
Inanaga, Minako; Sato, Koji
Daiichi Seiyaku Co, Japan
Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
Patent DOCUMENT NUMBER: TITLE: INVENTOR (S): PATENT ASSIGNEE (S): SOURCE: DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Japanese

PATENT NO. KIND DATE JP 07109237 OTHER SOURCE(S): 19931012

AB The title compds. (I; R = OR1 or CO2R2; wherein R1 = H or CH2Fh; R2 = H,

lower alkyl), useful as intermediate for an antibacterial agent

(III), are prepd. by reductive debromination of 2-bromo-2-fluorocyclopropane derivs.

(II; R = same as above), involving (1) treatment of I with an alkali

alk. earth metal in the presence of a H-source, and in particular,

an alc., (2) treatment of I with Zn in H2O-contg. acetone, or (3) catalytic hydrogenation of I in the presence of a base, in

and ethylenediamine. Thus, 259 mg II (R = PhCH20) (cis/trans isomer ratio

= 1.04) (prepn. given) was dissolved in 5 mL MeOH followed by adding

mg Na metal and the resulting mixt. was stirred at room temp. to give 28.2% trans-I (R = PhCH2O) and cis-I (R = PhCH2O). The starting material

rial II (R = PhCH2O) was prepd. in 59% yield by carbene insertion of allyl benzyl ether with Br2CHF in the presence of KOH and MgSO4 under ice-cooling and hydrogenated over 5% Pd-C in MeOH to give 98% II (R =

L7 ANSWER 25 OF 139 CAPLUS COPYRIGHT 2002 ACS

164342-85-2 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, ethyl ester, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

84388-71-6P, Ethyl cis-2-fluorocyclopropanecarboxylate 84388-72-7P, Ethyl trans-2-fluorocyclopropanecarboxyliate 105919-34-4P, cis-2-Fluorocyclopropanecarboxylic acid 130340-04-4P, trans-2-Fluorocyclopropanecarboxylic acid RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. of fluorocyclopropanemethanol and -carboxylic acid vs. by

(CA INDEX NAME)

Relative stereochemistry.

84388-72-7 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, ethyl ester, (1R,2S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry,

ANSWER 25 OF 139 CAPLUS COFYRIGHT 2002 ACS (Continued) HOCH20) which was oxidized with KMn04 in acetone to II (R = H02C). L7 II (R = HOCH2O) was dispolved in acetone/H2O (80/20 vol. ratio) and after adding
3.92 g Zn powder, refluxed for 16 h to give a mixt. of cis- and = HOCH2O) in 80.8% yield. II (R = HO2C) was dissolved in BuOH/Et3N vol. ratio) followed by adding 460 mg Na metal and the resulting . Vas string followed by adults too mig he metal and the transtance of the string string at room temp. for 1 h to give 10% trans-I (R = HO2C) and 9.6% cis-I (R = HO2C).

16:492-61-1P, cis-2-Bromo-2-fluorocyclopropanecarboxylic acid 16:492-62-22P, trans-2-Bromo-2-fluorocyclopropanecarboxylate 16:492-62-2P. Ethyl cis-2-bromo-2-fluorocyclopropanecarboxylate 16:492-62-2P. Ethyl trans-2-bromo-2-fluorocyclopropanecarboxylate RL: RCT (Reactant) SPN (Synthetic preparation)) PREF (Preparation) (intermediate) prepp. of fluorocyclopropanemethanol and -carboxylic acid derivs. by reductive debromination of bromofluorocyclopropanemethanol and -carboxylic acid derivs.)

16:192-61-1 CAPUS

Cyclopropanearboxylic acid, 2-bromo-2-fluoro-, cis- (9CI) (CA INDEX mixt. was Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

161492-62-2 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, trans- (9CI) (CA CN C, INDEX NAME)

Relative stereochemistry.

164342-84-1 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, ethyl ester, cis-(CA INDEX NAME)

Relative stereochemistry.

ANSWER 25 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

105919-34-4 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

130340-04-4 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 26 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1995:718026 CAPLUS 123:338860 ANSWER 26 OF ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: The mechanism of RuO4-mediated oxidations of isotope effects, solvent effects and substituent effects ethers: Bakke, Jan M.; Froehaug, Astrid E. Organic Chemistry Lab., Norwegian Inst. CORPORATE SOURCE: Technology, Trondheim, N-7034, Norway
Acta Chem. Scand. (1995), 49(8), 615-22
CODEN: ACHSE7, ISSN: 0904-213X
Journal SOURCE: CODEN: ACHSE7, ISSN: 0904-213X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mechanism of the RuO4-mediated oxidn. of ethers to esters has
been investigated. Oxidn. of cyclopropylmethyl Me ether gave Me cyclopropanecarboxylate. No rearranged products were obsd. On RuO oxidn. of benzyl Me ether and p-methoxybenzyl Me ether in CCl4 with oxidn. of benzyl Me ether and p-methoxybenzyl Me ether in CCl4 with NaIC4

as stoichiometric oxidant, no chlorinated products were obsd. A series of

4-substituted benzyl Me ethers was oxidized with RuO4-NaIO4. A correlation of the rate of the reaction with Hammett .sigma.-values gave a .rho. of -1.7, indicating only a moderate charge sepn. in the transition state (TS). Benzyl Me ether (1) was oxidized in a series of acetone-water mixts. From these expts., a m-value of 0.11 was obtained, indicating a non-polar TS for the reaction. PhcHDOCH3 (2) and PhcD2CH3 (3) were oxidized and two deuterium isotope effects, one of 6.1 .+- .0.4 and another of 1.3 .+- .0.1 were obtained. If one assumes a one-step reaction mechanism, the value of 1.3 would be a large .alpha.-secondary isotope effect, indicating a change in the hybridization of the benzylic carbon carbon during the reaction. .alpha.-Methylbenzyl Me ether (4) was oxidized seventh of the rate of 1, despite the fact that 4 would have given a stable carbocation than 1. These conflicting pieces of evidence are difficult to rationalize with a hydride or hydrogen abstraction  ${\bf r}$ mechanism Instead it is proposed that the reaction proceeds by either a reaction or by a reversible oxidative addn. of the ether to RuO4 followed Day of Slow concerted step to give the product.

1759-53-1P, Cyclopropanecarboxylic acid 2868-37-3P,

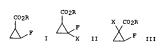
Methyl cyclopropanecarboxylate

RL: PNU (Preparation, unclassified): PREP (Preparation)

(isotope effects, solvent effects and substituent effects and mechanism

L7 ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:648076 CAPLUS
DOCUMENT NUMBER: 123:55420
TITLE: Selective dehalogenation method
INVENTOR(S): Akiba, Toshifumi; Ikeya, Takanobu; Kawanishi,
Hirofumi; Yukimoto, Yusuke; Kamihara, Shinji; Ebata, Tsutomu
Daiichi Pharmaceutical Co., Ltd., Japan
PCT Int. Appl., 23 pp.
CODEN: PIXXD2
Patent
Japanese
1 PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.					ND	DATE			A	ο.	DATE					
	WO	9504	712		A	1	1995	0216		W	0 19	94-J	P128	0	1994	0803	
		W:	US														
		RW:	AT,	BE,	CH,	DE.	DK,	ES.	FR.	GB.	GR.	IE.	IT.	LU.	MC.	NL.	РТ
SE				-	,									,	,	,	
	EP	7128	31		A.	1	1996	0522		E	P 19	94-9	2306	3	1994	0803	
	EP	7128	31		В	1	1999	1103						-			
		R:	AT,	BE,	CH,	DE,	DK,	ES.	FR.	GB.	GR.	IE.	IT.	LI.	LU.	MC.	NT.
PT,	SE															,	
	AT	1862	92		E		1999	1115		A1	r 19	94-9	2306	3	1994	0803	
	ES	2140	547		T:	3	2000	0301		E:	5 19	94-93	2306	3	1994	0803	
	JP	0709	7353		A:	2	1995	0411		JI	P 19	94-11	8317	3	1994	0804	
	US	5780	669		A		1998	0714							1996		
PRIC	RIT	APP	LN.	INFO.	. :					JP 19					1993		
										WO 19					1994		
OTHE	ER SC	URCE	(S):			CAS	REAC	T 12									
GI																	



AB Fluorocyclopropanecarboxylates I (R = H, alkyl) were prepd. by catalytic hydrogenolysis of halofluorocyclopropanecarboxylates II or III (R =

alkyl; X = Br, Cl) in the presence of a base and a metal catalyst. Thus, hydrogenolysis of cis- and trans-2-chloro-2-fluoro-1-cyclopropanecarboxylic acid Et ester in EtOH in the presence of 1,2-diaminoethane and Raney Ni at room temp. for 24 h gave 88.94 and trans-2-fluoro-1-cyclopropanecarboxylic acid Et ester. 130340-02-2 130340-13-5 161492-61-1

RL: RCT (Reactant)

L7 ANSWER 26 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

of Rud-mediated oxidns. of ethers)
1759-53-1 CAPLUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



2868-37-3 CAPLUS Cyclopropanecarboxylic acid, methyl ester (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
(selective dehalogenation of halofluorocyclopropanecarboxylates)
130340-02-2 CAPLUS
Cyclopropanecarboxylic acid, 2-chloro-2-fluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 130340-13-5 CAPLUS CN Cyclopropanecarboxylic acid, 2-chloro-2-fluoro-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

161492-61-1 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

161492-62-2 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-2-fluoro-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 152237-12-2P 152237-13-3P 155687-12-0P 185607-14-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (selective dehalogenation of halofluorocyclopropanecarboxylates) 152237-12-2 CAPLUS L7 ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2-chloro-2-fluoro-, ethyl ester, cis-CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 152237-13-3 CAPLUS CN Cyclopropanecarboxylic acid, 2-chloro-2-fluoro-, ethyl ester, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 155687-12-0 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, 1-chloro-, 1-methyl ester (9C1) INDEX NAME)

155687-14-2 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-chloro-, 2-(1,1-dimethylethyl) 1-methyl ester (9CI) (CA INDEX NAME)

84388-71-6P 105919-34-4P 130340-04-4P 155687-11-9P 155687-15-3P 155687-16-4P

ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 1-chloro-2-fluoro-, methyl ester, trans-(SCI) (CA INDEX NAME)

Relative stereochemistry.

155687-16-4 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2-fluoro-, methyl ester, cis-RN CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 157042-45-0 CAPLUS CN Cyclopropanecarboxylic acid, 1-chloro-2-fluoro-, cis- (9CI) (CA INDEX 157042-45-0 CAPLUS NAME)

Relative stereochemistry.

157042-46-1 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2-fluoro-, trans- (9CI) (CA CN C, INDEX NAME)

Relative stereochemistry.

L7 ANSWER 27 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 157042-45-0P 157042-46-1P RL: SPN (Synthetic preparation), PREP (Preparation) (selective dehalogenation of halofluorocyclopropanecarboxylates) 84388-71-6 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, ethyl ester, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

105919-34-4 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

130340-04-4 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

155687-11-9 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, methyl ester, trans- (9CI)

Relative stereochemistry.

RN 155687-15-3 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE:

Japanese 1 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE

A2 19941220 JP 1993-134399 19930604
CASTRACT 122:314202 MARRAT 122:314202 PATENT NO. JP 06345693 OTHER SOURCE(S):

Fluorocyclopropanedicarboxylate esters I (R = lower alkyl), a process

the prepn. of I by treatment of CH2(CO2R)2 (II, R = lower alky1) with FCHXCH2Y (X, Y = Cl, Br) in hydrophlic solvents in the presence of

or in hydrophobic solvents in the presence of bases and phase-transfer catalysts, and a process for the prepn. of the title esters III (R = lower alkyl), useful as intermediates for drugs, by decarboxylation

in the presence of bases and phase-transfer catalysts are claimed. BrCHFCH2Br was added dropwise to a mixt. of II (R = Et),

K2CO3, and Bu4NBr at 50.degree. over 4 h and the reaction mixt. was stirred

50.degree, for 5 h. After addn. of K2CO3 and dropwise addn. of

BrCHFCH2B over 2 h, the reaction mixt. was further stirred for 10 h to give 65% I (R

= Et) (IV). A soln. contg. KOH, EtOH, and dioxane was added dropwise

mixt. of IV, 18-crown-6, and dioxane at room temp. and the reaction

was kept at room temp. for 3 h. The reaction mixt., after heating to remove EtOH, was refluxed at 100.degree. for 20 h to give 61% III (R

at trans/cis ratio 91:9.
IT 84388-71-6P 84388-72-7P 156816-78-3DP, lower

Alkyl esters
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

ANSWER 28 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

(Preparation)
(prepn. of fluorocyclopropanecarboxylate esters)
94388-71-6 CAPLUS
Cyclopropanecarboxylic acid, 2-fluoro-, ethyl ester, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 8430C CN Cyclopropanc (9CI) (CA INDEX NAME) 84388-72-7 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro-, ethyl ester, (1R,2S)-rel-

Relative stereochemistry.

156816-78-3 CAPLUS Cyclopropanecarboxylic acid, 2-fluoro- (9CI) (CA INDEX NAME)

163266-03-3P 163266-04-4DP, lower alkyl esters
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of fluorocyclopropanecarboxylate esters)
163266-03-3 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-fluoro-, diethyl ester (9CI)

INDEX NAME)

L7 ANSWER 29 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:347099 CAPLUS
DOCUMENT NUMBER: 122:133463
Process and catalysts for the preparation of lower alkyl
3-{2-chloro-3,3,3-trifluoroprop-1-en-1-y1}-2,2-dimethylcyclopropanecarboxylate insecticide intermediates
INVENTOR(S): Bowden, Martin Charles; Turnbull, Michael

Drysdale
PATENT ASSIGNEE(S):
SOURCE: Zeneca Ltd., UK
PCT Int. Appl., 16 pp.
CODEN: PIXXD2
Patent
English

DOCUMENT TYPE: LANGUAGE:

	LY A	S: ACC. I INFOR	NUM.	COU			115h										
FALL														_			
	PATENT NO. KI						DATE			Α.	PPLI	CATI	ON N	٥.	DATE		
							1994	1208		W	0 19	94-G	B113	9	1994	0525	
		W:	AU,	BB,												KP,	
ΚZ,																	
			LK,	LV,	MD,	MG,	MN,	MW,	NO,	NZ,	PL,	RO,	RU,	SD,	SK,	ΤJ,	TT,
UA,																	
		RW:		UZ,			nte	<b>77.0</b>		an	-					***	
SE,		KW:	AI,	DE,	cn,	DE,	DK.	ES,	FK,	GB,	GK,	IE,	IT,	LU,	MC,	NL,	PT,
35,			BF.	BJ.	CF.	CG.	CT.	CM.	GA.	GN.	MT	MR.	NE.	SN.	TD.	TG	
	GB	2278		,	À		1994									0524	
	GB	2278	351		В	2	1997	0730									
	AU	2278 9468 6966 9406	006		A	1	1994	1220		A	U 19	94-6	8006		1994	0525	
	ΑU	6966	83		В	2	1998	0917									
	BR	9406	657		A		1996	0130		В	R 19	94-6	657		1994	0525	
	EP	7003	75		A	1	1996	0313		E	P 19	94-9	1630	כ	1994	0525	
	EP	7003			В		1998										
D.m.	C.E.	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	IT,	LI,	LU,	MC,	NL,
PT,		1124	930		76		1996	0610		,,	1 10	04 1	0220		1004	0525	
		1065			R		1996 2001	0502		٠.	N 15	<b>34-1</b>	3220	•	1334	0525	
	JP	0950	4776		T	2	1997	0513		J	P 19	94-5	2583	5	1994	0525	
		8328					1998	0401		E	P 19	97-1	2153	3	1994	0525	
		R:	AT,	BE,	CH,											SE,	
ΙE																	
		2120			C		1998						2256		1994		
	AT	1748	96		E	_	1999	0115							1994		
	ES	2125	456		T	3	1999	0301					1630		1994		
	C	1306	,		B A	•	2000	0912					109		1994 1994		
		1097			A		2000						0979		1994		
		1792			В	1	2000	0120					1174		1994		
		2811			В	6	2000	1211					494		1994		
		1168			В										1994	0525	
	FI	9505	702		Ā		1005	1127							1995		
		9504			A		1995	1127		N	0 19	95-4	813		1995 1998	1127	
		1220					1999	0623		C.	N 19	98-1	1670	5	1998	0725	
PRIO	RIT	APP	LN.	INFO	.:					GB 1	993-	1105	4	A	1993	0528	

L7 ANSWER 28 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

163266-04-4 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-fluoro- (9CI) (CA INDEX NAME)

acaricide
intermediates (no data), are prepd. by reacting
intermediates (no data), are prepd. by reacting
CF3CKCICH(OR)CH:C(CH3)2 (X
= Cl. Br) with a tri(C1-4 alky1) orthoacetate in the presence of a
catalytic amt. of an acid catalyst at an elevated temp. for a
sufficient time to produce ester CF3CKCICH:CRC(CH3)2CH2CO2R (R = C1-4
alky1) which is treated with .gtoreq.1 molar equiv. of a base.

IT 74609-46-40P, lower alky1 esters 89376-81-2P
RL: INF (Industrial manufacture); SFN (Synthetic preparation); PREP
(Preparation)
(process and Catalysts for the prepn. of)
RN 74609-46-4 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propany1)-2,2dimethy1- (9CI) (CA INDEX NAME)

RN 83376-81-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, methyl ester, [1.slpha.,3.slpha.(Z)]- (9CI) (CA INDEX
NAME)

Relative stereochemistry.
Double bond geometry as shown.

ΙT 71461-40-0P

IT 71461-40-0P

RL: IHF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(process and catalysts for the prepn. of alkyl 3-(2-chloro-3,3,3-trifluoroprop-1-en-1-yl)-2,2-dimethyleyclopropanecarboxylate insecticide intermediates)
RN 71461-40-0 CAPLUS
CN Cyclopropanecarboxylate acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

ANSWER 29 OF 139 CAPLUS COPYRIGHT 2002 ACS dimethyl-, ethyl ester (9CI) (CA INDEX NAME) (Continued)

L7 ANSWER 30 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 159587-29-8 CAPLUS CN Cyclopropanecarboxylic acid, 1-chloro-2-ethyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

159507-30-1 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2-(1,1-dimethylethyl)-, trans-CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

159587-31-2 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2,3-dimethyl-, (1.alpha.,2.alpha.,3.beta.) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 159587-33-4 CAPLUS CN Cyclopropanecarboxylic acid, 1-chloro-2-(chloromethyl)-, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 30 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:92504 CAPLUS
DOCUMENT NUMBER: 122:30975
TITLE: Cyclonecus Corporation Cyclopropyl building blocks for organic

synthesis. 29.

Convenient synthesis of substituted l-chlorocyclopropanecarboxylic acids Coudret, J. L.; Ernst, K.; de Meijere, A.; AUTHOR (S):

Waegell, B. CORPORATE SOURCE: Lab. Stereochim., Fac. Sci. St-Jerome, Marweille, F-13397, Fr.
Synthesis (1994), (9), 920-2
CODEN: SYNTEF, ISSN: 0039-7881
Journal
English
CASREACT 122:30975

SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB Catalytic oxidn. of various substituted 1-chloro-1-trichloroethenylcyclopropanes
[IR1-Me, Eq. t.-Bu, GR2C1, SIMB3, GR2-R3-R
4-Hr, R1-R3-Me, R2-R4-Hr, R1-R2-R3-R4-Me) (RIR2) = (CH2) 2, R3-R4-H] with
ruthenium tetroxide generated in situ produces the corresponding
1-chlorocyclopropanecarboxylic acids (II; R1,R2,R3,R4 as above) in
good

Relative stereochemistry.

L7 ANSWER 30 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 159587-34-5 CAPLUS
CN Cyclopropanecarboxylic acid, 1-chloro-2-(trimethylsilyl)-, trans-(9CI)

(CA INDEX NAME)

159587-36-7 CAPLUS Cyclopropanecarboxylic acid, 1-chloro-2-ethyl-, 1,1-dimethylethyl

(9CI) (CA INDEX NAME)

ANSWER 31 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1994:605742 CAPLUS MENT NUMBER: 121:205742

ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE: Preparation of optically active bis-oxazolines

and use

of their copper complexes in prepn. of chrysanthemates.

Masamune, Satoru; Lowenthal, Richard E. Massachusetts Institute of Technology, USA INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

U.S., 10 pp. CODEN: USXXAM DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. APPLICATION NO. DATE KIND DATE US 5298623 OTHER SOURCE(S): 19940329 US 1991-789748 19911108 CASREACT 121:205742

AB M.Xn [ M = CuOTf, CuOBu-t, CuClO4(MeCN)2, Cu(OTf)2, Cu(OBu-t)2, Cu(ClO4)2;

X = bisoxazoline I, II, etc.; n = 1,2; R = H, Me; Ph groups may be substituted], were claimed for use in catalytic cyclopropanation of trisubstituted and cis-1,2-disubstituted olefins. Thus, cis-(+)-2-amino-1,2-disphuplethanol and malonic acid bisimidate were stirred with Et3N in CH2Cl2 at 0-23.degree. to give 72% bisoxazoline I. I

was stirred with CuOTf benzene complex in CH2C12 for 1 h; the mixt.

filtered into a soln. of 2,5-dimethyl-2,4-hexadiene in CH2C12

followed by dropwise addn. of dicyclohexylmethyl diazoacetate (prepn. given) at 0.degree. The resulting mixt. was warmed to 23.degree. and stirred

to give 84% chrysanthemate ester, which was hydrolyzed to chrysanthemic acid using aq. NaOH/EtOH.

ANSWER 31 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 31 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 4638-92-0P, (+)-trans-Chrysanthemic acid 55701-03-6P 157826-02-3P 157904-70-6P

157826-02-3P 157904-70-6P
RL: SPN (Synthetic preparation), PREP (Preparation)
(preph. of, using optically active copper-bisoxazoline
cyclopropanation
catalyst)
RN 4638-92-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

55701-03-6 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,(1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

157826-02-3 CAPLUS

137828-02-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, dicyclohexylmethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

To 1904-10-0 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
dicyclohexylmethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 32 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1994:605687 CAPLUS DOCUMENT NUMBER: 121:205687

DOCUMENT NUMBER: TITLE:

121:20568/
Lipase catalyzed kinetic resolution of racemic (.+-.)2,2-dimethyl-3-(2-methyl-1-

propenyl)cyclopropanecarboxyl esters Rao, A. Bhaskar; Rehman, H.; Krishnakumari, B.; AUTHOR(S): Yadav,

Yadav,

CORPORATE SOURCE:

Div. Org. Chem. I, Indian Inst. Chem. Technol.,
Hyderabad, 500 007, India

SOURCE:

Tetrahedron Lett. (1994), 35(16), 2611-14

CODEN: TELEAY, ISSN: 0040-4039

DOCUMENT TYPE:

LANGUAGE:

English

OTHER SOURCE(s):

CASREACT 121:205687

AB Optically active (IR) (-) and (1S) (+) -trans-Chrysanthemic acid and its
esters were prepd. from corresponding racemic Me ester by lipase
mediated

mediated
enantioselective hydrolysis, is described.

17 2259-14-5P, (15)-trans-Chrysanthemic acid 4638-92-0P,
(1R-trans)-Chrysanthemic acid 26770-96-7P 41641-27-4P
8221-30-3P 157942-47-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 2259-14-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(1S,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

4638-92-0 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

26770-96-7 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (1S,3S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-27-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester, (1S,3S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

83213-30-3 CAPLUS Cyclopropanecatoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1-methylethyl ester, (15-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

157942-47-7 CAPIUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 2,2,2-trichloroethyl ester, (15-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 33 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:579124 CAPLUS
DOCUMENT NUMBER: 121:179124
TITLE: 5 Expressed extractly and generality of the palladium-catalyzed cyclopropanation of .alpha.,beta.-unsaturated carboxylic acids derivatized with Oppolzer's sultam vallgaarda, Jerk; Appelberg, Ulf; Coeregh,

AUTHOR(S): Ingeborg;

Hacksell, Uli Dep. Org. Pharm. Chem., Uppsala Biomed. Cent., Uppsala, 5-751 23, Swed. J. Chem. Soc., Perkin Trans. 1 (1994), (4),

CORPORATE SOURCE:

SOURCE: 461-70

CODEN: JCPRB4: ISSN: 0300-922X

DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

English CASREACT 121:179124

AB .alpha.,.beta.-Unsatd. carboxylic acids derivatized with camphosultam I as a chiral auxiliary has been stereoselectively cyclopropanated. The selective reaction gave cyclopropanated products with the IR, ZR abs. configuration, as indicated by the optical rotations and X-ray structure detn. The temp. dependence of the reaction was studied with three substrates. The highest stereoselectivity was obtained at temps. above 25 complete conversion, and electron-withdrawing substituents at these positions seem to prevent the reaction. The auxiliary was removed by using titanium(IV) isopropoxide in benzyl alc. followed by alk. hydrolysis of the intermediate ester. Thus, treating sultam I with 2 methoxycinnamoyl chloride followed by cyclopropanation with gave cyclopropane II which was deprotected and converted in 2 method.

gave cyclopropane II which was deprotected and converted in 3 steps to the

ANSWER 33 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) potent 5-HT1A receptor agonist (1R,2S)-2-(2-hydroxyphenyl)-N,N-dipropylcyclopropylamine (III).
157518-48-48
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation) (prepn. and sapon. of)
157518-48-4 CAPLUS
Cyclopropanecarboxylic acid, 2-[2-(trifluoromethyl)phenyl]-, methyl r,

ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

104131-70-69 157518-49-59
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
104131-70-6 CAPLUS
Cyclopropanecarboxylic acid, 1,2-dimethyl-, methyl ester, (1R,2R)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

157518-49-5 CAPLUS Cyclopropanecarboxylic acid, 2-[2-(trifluoromethyl)phenyl]-, trans-(9CI)

(CA INDEX NAME)

Relative stereochemistry.

3471-10-1P 5034-03-7P 10487-86-2P 51197-36-5P 110901-90-1P RL: SFN (Synthetic preparation); PREP (Preparation) (Stereoselective prepn. of, use of chiral sultam intermediate for) 3471-10-1 CAPLUS

L7 ANSWER 33 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (-).

5034-03-7 CAPLUS Cyclopropanecarboxylic acid, 2-(2-methoxyphenyl)-, (1R-trans)- (9CI) INDEX NAME)

Absolute stereochemistry.

10487-86-2 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-, (1R,2R)- (9CI) (CA INDEX

Absolute stereochemistry.

51197-36-5 CAPLUS Ferrocene, (2-carboxycyclopropyl)-, stereoisomer (9CI) (CA INDEX

L7 ANSWER 34 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:299012 CAPLUS
DOCUMENT NUMBER: 120:299012
TITLE: A convergent approach toward the tigliane ring
system
AUTHOR(S): Dauben, William G., Dinges, Jurgen; Smith, Dauben, William G.; Dinges, Jurgen; Smith,

Timothy C.
CORPORATE SOURCE:
94720, USA
SOURCE:

Dep. Chem., Univ. California, Berkeley, CA,

J. Org. Chem. (1993), 58(27), 7635-7 CODEN: JOCEAH; ISSN: 0022-3263

Journal English CASREACT 120:299012 DOCUMENT TYPE:

OTHER SOURCE(S):

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

A convergent synthesis of the C6,C9-oxido-bridged tigliane system I

been achieved. The central step of the synthesis was a rhodium(II) acetate-catalyzed tandem cyclization-cycloaddn. reaction

diazoacetoacetates II and III. A 1:1-ratio of the targeted ring

em I and its 45\*, 105\*-isomer IV were isolated since the A-ring piece was introduced in its racemic form. The identity of both products was confirmed by x-ray structural anal. The rhodium-promoted formation

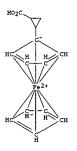
confirmed by X-ray structural anal. The rhodium-promoted rormation of the B- and C-rings showed a remarkably high stereospecificity which was independent of the chirality at C-12 and either of trans-configurations of the C-4 and C-10 asym. centers.

1 38692-37-4P 38692-38-5P 67528-58-9P
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation) (prepn. and reaction of, in convergent synthetic approach to tigliane diterpene ring system)
RN 38692-37-4 CAPLUS
CN Cyclopropaneoarboxylic acid, 3-formyl-2,2-dimethyl-, ethyl ester, (1R,3R)-rel-(9C1) (CA INDEX NAME)

Relative stereochemistry.

38692-38-5 CAPLUS

ANSWER 33 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)



110901-90-1 CAPLUS Cyclopropanecarboxylic acid, 2-(3-methoxyphenyl)-, (1R,2R)- (9CI) (CA INDEX NAME)

ANSWER 34 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 3-formyl-2,2-dimethyl-, ethyl ester, cis-(9C1) (CA INDEX NAME)

67528-58-9 CAPLUS Cyclopropanecarboxylic acid, 3-ethenyl-2,2-dimethyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry

ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1994:298097 CAPLUS 120:298097 DOCUMENT NUMBER: TITLE:

.alpha.-Hydroxy esters as chiral auxiliaries in asymmetric cyclopropanations by

rhodium(II)-stabilized

vinylcarbenoids

AUTHOR(S): Cantrell, Davies, Huw M. L.; Huby, Nicholas J. S.;

William R., Jr.; Olive, Jennifer L.
Dep. Chem., Wake Forest Univ., Winston-Salem, NC, 27109, USA
J. Am. Chem. Soc. (1993), 115(21), 9468-79
CODEN: JACSAT; ISSN: 0002-7863 CORPORATE SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI English CASREACT 120:298097

AB The use of several .alpha.-hydroxy esters as chiral auxiliaries for asym.

cyclopropanation with rhodium-(II)-stabilized vinylcarbenoids is presented. Thus, (E)-PhCH:CHC(COR):N2 [R = OCHMeCH2CO2Me, OCHPhCO2Me,

(2S)-1-methoxy-3,3-dimethyl-1-oxo-2-Bu, etc.] reacted with PhCH:CH2 in the

presence of Rh2(OAc)4 to give cyclopropanes I and II. Use of either (R)-pantolactone or (S)-lactate allowed entry into both series of enantiomeric vinylcyclopropanes with predictable abs. stereochem.

and electronic modifications of the chiral auxiliary as well as catalyst structure were shown to have major effects on the asymmetric induction. These results were rationalized on the basis of an interaction

between the carbonyl oxygen of the chiral auxiliary and the carbenoid carbon. By combining the asym. cyclopropanation with a subsequent rearrangement, an enantioselective entry into hydroazulenes was

achie The potential of the asym. cyclopropanation was illustrated by a

short

synthesis of (1R, 2R)-phenylcyclopropane amino acid III. 153062-74-9P

ISSU02-74-9F RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and aminolysis of) 153062-74-9 CAPLUS

L7 ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS Double bond geometry as shown.

152978-94-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 1-(methoxycarbonyl)-2,2-dimethylpropyl ester, [15-[1.alpha.(R\*),1(E),2.beta.]]- (SCI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

152978-95-5 CAPLUS

1929/8-95-5 Chrus Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 2-(dimethylamino)-1-methyl-2-oxoethyl ester, [15-[1.alpha.(R\*),1(E),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown

152978-96-6 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 1-methyl-2-oxopropyl ester, [1S-[1.alpha.(S\*),1(E),2.beta.]]- (9CI)

INDEX NAME)

L7 ANSWER 35 of 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-,
mono(tetrahydro-4,4-dimethyl2-oxo-3-furanyl) ester, [1R-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

138770-15-7P 152978-92-2P 152978-93-3P 152978-94-4P 152978-95-5P 152978-96-6P 153062-69-2P 153062-70-5P 153062-75-0P 153062-75-0P RL: SPN (Synthetic preparation); PREP (Preparation) Au: Srm (syminetic preparation); Fram (Freparation)
(prepan. of)
(N) 138770-15-7 CAPLUS
(N) Benzenacetic acid,
.alpha.-[[[2-phenyl-1-[2-phenylethenyl)cyclopropyl]car
booyl]owy]-, methyl ester (9CI) (CA INDEX NAME)

152978-92-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 3-methoxy-1-methyl-3-oxopropyl ester (9CI) (CA INDEX NAME)

RN 152978-93-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-,
1-(methoxycarbonyl)-2-methylpropyl ester,
[15-[1.alpha.(R\*),1(E),2.beta.]](9C1) (CA INDEX NAME)

Absolute stereochemistry

L7 ANSWER 35 OF 139 CAPLUS Absolute stereochemistry. Double bond geometry as shown. ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

153062-69-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-{2-phenylethenyl}-, 2-methoxy-1-methyl-2-oxoethyl ester, [IS-[1.alpha.(R\*),1(E),2.beta.]}-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

153062-70-5 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-{2-phenylethenyl}-, 2-methoxy-1-methyl-2-oxoethyl ester, [1R-[1.alpha.(S\*),1(E),2.beta.]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

153062-71-6 CAPLUS

The following state of the first state of the first

Absolute stereochemistry.

L7 ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Double bond geometry as shown.

153062-72-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 1-(methoxycarboxyl)-2,2-dimethylpropyl ester, [1R-[1.alpha.(S\*),1(E),2.beta.]]- {9CI} (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 153062-73-8 CAPLUS CN cyclopropanecarboxylic acid, 2-phenyl-1-[(1E)-2-phenylethenyl]-, methyl ester, (1S,2S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

 $\label{eq:continuous} 153062-75-0 \quad CAPLUS \\ \text{Cyclopropanecarboxylic acid, } 2\text{-phenyl-1-(2-phenylethenyl)-,} \\ 2\text{-}(\text{dimethyl-amino)-1-methyl-2-cxoethyl ester, } [1R-[1.alpha.(S^*),1(E),2.beta.]]- (9CI) \quad (CA INDEX NAME) \\ \end{aligned}$ 

Absolute stereochemistry. Double bond geometry as shown.

ANSWER 36 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1994:269715 CAPLUS MENT NUMBER: 120:269715 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

Preparation of optically active diphosphinocyclopropanecarboxylic acid derivatives as

asymmetric allylation catalysts INVENTOR(S):

asymmetric allylation catalyst: Minami, Susumu Nissan Chemical Ind Ltd, Japan Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF Patent PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 05306291 OTHER SOURCE(S): 2 19931119 JP 1992-106257 19920424 CASREACT 120:269715; MARPAT 120:269715 A2

AB The title derivs. I [R = H, Cl-6 alkyl; Rl, R2 = H, Cl-6 alkyl, (Cl-4 alkyl- or alkoxy-substituted) Ph; Z = PR22, P(0)R22] are prepd.

Prepn. of optically active compds. in the presence of I and transition metal compds.

or Pd compds. is also claimed. Refluxing a mixt. of Me3C

(-)-trans-2, 3-bis (diphenylphosphino)-1-methyl-1-cyclopropanecarboxylate [prepd. from Me3C .alpha.-chloropropionate and trans-1,2-bis(diphenylphosphinyl)ethene in 3 steps] and p-MeC6H4SO3H in C6H6

for 2 h
gave 71% (-)-trans-2,3-bis (diphenylphosphino)-1-methyl-1cyclproppanecarboxylic acid (II). A suspension of Pd acetate and II

THF was mixed with 2-cyclohexenyl acetate, then treated with a soln.

1-menthyl diethylphosphonoacetate in THF at 65.degree. for 5 h to

1001 1-menthyl (2-cyclohexenyl)diethylphosphonoacetate of 61% e.e. 141540-17-2P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and optical resoln. of) 141540-17-2 CAPUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphinyl)-1-methyl-, 1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX

ANSWER 35 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$\Pr_{Ph} = \Pr_{Q} = \Pr_{$$

ANSWER 36 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) NAME)

Relative stereochemistry.

INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

141540-19-4 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
{1.alpha.,2.alpha.,3.beta.}-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

141610-79-9 CAPLUS Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-, 1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA INDEX NAME)

L7 ANSWER 36 OF 139 CAPLUS COPYRIGHT 2002 ACS Rotation (+). Absolute stereochemistry unknown. (Continued)

141610-80-2 CAPLUS Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-, (1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

L7 ANSWER 37 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

39515-41-6P, Fenpropathrin
RL: SFN (Synthetic preparation); PREP (Preparation)
(prepn. of, from tetramethylcyclopropanecarboxylic acid)
39515-41-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME) IТ

L7 ANSWER 37 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1594:163677 CAPLUS
DOCUMENT NUMBER: 120:163677
TITLE: Preparation of fenpropathrin
INVENTOR(s): Zhong Zhuor Chen, Huilin; Li, Wuchong; et al.
Dalian Institute of Chemicophysics, Peop. Rep. China SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp. CODEN: CNXXEV DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 19930324 CN 1991-106222 199 CASREACT 120:163677; MARPAT 120:163677 19910830 CN 1070186 OTHER SOURCE(S):

AB The title compd. (I) is prepd. from 2,2,3,3-tetramethylcyclopropanecarboxy lic acid via reaction of 2,2,3,3-tetramethylcyclopropanecarbonyl chloride

with m-phenoxybenzaldehyde and NaCN in the presence of a

with m-phenoxybenzaidenyde and noon phase-transfer catalyst of the formula Cm-(OCH2CHR) nOH [Cm - fatty alkyl radical with 20-30 carbon atoms; n = 3-15; R = H, Me]. E.g., 2,2,3,3-tetramethylcyclopropanecarbonyl chloride (prepd, from 2,2,3,3-1,3-1,4-1) catalyst conditions of the condition of the

alc. and 8 equiv 1,2-epoxypropane) was treated with m-phenoxybenzaldehyde and

for 3-5.5 h to give I.
15641-58-4, 2,2,3,3-Tetramethylcyclopropanecarboxylic acid
RL: PROC (Process)
(conversion of, into acid chloride)
15641-58-4 CAPUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6CI, 8CI, 9CI) (CA
INDEX NAME)

ANSWER 38 OF 139 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:76650 CAPLUS 120:76650

DOCUMENT NUMBER: TITLE: 120:76650 Mild, one-pot conversion of carboxylic acids into esters using phase transfer catalysis Puntambekar, Hemalata M.; Naik, D. G.; Kapadi, A.

AUTHOR (S):

Res. Inst., MACS, Pune, 411 004, India Indian J. Chem., Sect. B (1993), 32B(7), 793-4 CODEN: IJSBDB; ISSN: 0376-4699 CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(5): CASREAGT 120:76650
AB Aliph. satd. and unsatd. acids, benzylic acids, and arom. acids in

were esterified by treatment with alkyl halides in the presence of an aq.

soln. of K2CO3 and Bu4NBr as phase-transfer catalyst. 1759-53-1, Cycloprepanecarboxylic acid RE: RCT (Reactant) (esterification of, using one-pot procedure under phase transfer catalysis) 1759-53-1 CAPLUS Cyclopropasearboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

6887-83-8F, Ispropyl cyclopropanecarboxylate 54947-39-6P
, Butyl cyclopropanecarboxylate
RL: SPN (Synthetic preparation), PREF (Preparation)
(prepn. of, one-pot esterification procedure for)
6887-83-8 CAPLUS
Cyclopropanecarboxylic acid, 1-methylethyl ester (9CI) (CA INDEX

54947-39-6 CAPLUS Cyclopropanecarboxylic acid, butyl ester (9CI) (CA INDEX NAME)

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ANSWER 39 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
US 54750273 A 19951212 US 1993-148817 19931108
US 5510379 A 19960423 US 1995-448817 19931108
US 5510379 A 19960423 US 1995-452603 19950525
US 5602175 A 19960423 US 1995-452606 19950525
US 5703076 A 19970211 US 1995-452187 19950525
US 5703076 A 19971230 US 1995-452187 19950525
US 5708004 A 19970311 US 1995-451898 19950607
US 5610190 A 19970311 US 1995-450605 19950525
US 5708004 A 19970311 US 1995-476009 19950607
US 5610190 A 19970311 US 1995-476009 19950607
US 58104522 A 19970315 US 1995-56213 19950724
US 5872298 A 19990216 US 1997-854133 19970508
US 5872299 A 19990216 US 1997-854133 19970508
US 1991-789644 B2 19911114
US 1991-789644 B2 19911114
US 1991-789646 B2 19911114
US 1992-886556 B1 19920520
US 1992-886556 B1 19920520
US 1992-886556 B1 19920520
US 1993-148817 A 19911118
US 1993-145649 B3 19931123
US 1993-145649 B3 19931123
US 1993-152649 B3 19931123
   PRIORITY APPLN. INFO.:
   OTHER SOURCE(S):
                          R SOURCE(S): MARPAT 119:203856
Urea-contg. hydroxyethylamine protease inhibitor compds.
RRINCHR2CH(OH)CH2NR3C(Z)NR4R5 (R = H, acyl; R1, R4 = H, alkyl; R2 =
                           i,
aryl, cycloalkyl, cycloalkylalkyl, aralkyl; R3 = alkyl, alkenyl,
hydroxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl,
heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl; R5 = alkyl; Z =
  O, S)

were prepd., particularly as HIV inhibitors. Thus,
2,2-dimethyl-3-(4-
pyridyl)propionic acid underwent Curtius rearrangement with
diphenylphosphoryl azide and Et3N in toluene and the product was
 diphenyiphosphory: azide and hish in coldent and the product with 3(S)-[[N-(2-quinolinylcarbonyl)-L-asparaginyl]amino]-2(R)-hydroxy-4-phenyl-N-[(4-fluorophenyl)methyl]butylamine [2-C9H6NO-Asn-NHCH(CH2Fh)CH(OH)CH2NRCH2C6H4F-p (I, 2-C9H6N = 2-quinolinyl, R = H]
                          afford I [R = [[1,1-dimethy1-2-(4-pyridyl)ethyl]amino]carbonyl].
This

compd. showed HIV protease inhibitory activity as follows: IC50 = 4

mm and

ED50 = 37 nm.

IT 143225-20-1P

RL: RCT (Reactant), SPN (Synthetic preparation), PREP (Preparation)

(prepn. and amidation of)

RN 143225-20-1 CAPIUS

CN Cyclopropanearatioboxylic acid,

2-[[[3-[[[(1,1-dimethylethyl)amino]carbonyl]{
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L7 ANSWER 39 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1933:603856 CAPLUS DOCUMENT NUMBER: 119:203856 TITLE: Retroviral protease inhib Retroviral protease inhibitors Bertenshaw, Deborah Elizabeth, Freskos, John INVENTOR (S): Nicholas Getman, Daniel Paul; Heintz, Robert Martin; Lin. Ko Chung; Rogier, Donald Joseph, Jr.; Talley, John Jeffrey Monsanto Co., USA PCT Int. Appl., 199 pp. CODEN: PIXXD2 Patent PATENT ASSIGNEE (S): SOURCE: DOCUMENT TYPE: English 10 FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE WO 920868 A1 19920529 WO 1991-US8617 19911118
W: AU, CA, CS, FI, HU, JP, KR, NO, PL, SU, US
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, W: AU, CA, CS, FI, HU, JP, KR, NO, PL, SU, US

GR, IT, LU, ML, MR, NL, SE, SN, TD, TG

CA 2096525

AA 19920520

AA 19920521

AA 19920520

CA 1991-2096525 1991118

EF 558603

BI 19980826

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

JP 0650260

T2 1994031

EF 731088

A2 19960911

EF 731088

A3 19960911

EF 735019

A2 19961002

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 735019

A2 19961002

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 138667

A2 19971229

EF 813867

A2 19971229

EF 813866

A3 19980410

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 813868

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 813868

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 813868

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 813868

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

LEF 815856

A3 19980318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

L

ANSWER 39 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 3-methylbutyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]amino]carbonyl]-(9CI) (CA INDEX NAME)

31420-66-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and amidation of, with isoamylamine deriv.)
31420-66-3 CAPLUS
1,2-Cyclopropanedicarboxylic acid, monoethyl ester, (1R,2R)-rel- (SCI) (CA INDEX NAME)

IT 143244-74-0P

RI: RCT (Reactant); SPN (Synthetic preparation), PREP (Preparation)
(prepn. and sapon. of)
RN 143244-74-0 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[[[3-[[[1.1-dimethylethyl) amino] carbonyl] (

3-methylbutyl) aminoj-2-hydroxy-1-(phenylmethyl)propyl]amino]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

ANSWER 40 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1992:448236 CAPLUS MENT NUMBER: 117:48236

Ring expansion of tert-butyl 1-vinylcyclopropane-1-

AUTHOR(S): CORPORATE SOURCE: 27109,

carboxylates to .alpha.-ethylidenebutyrolactones Davies, Huw M. L.; Hu, Bathua Dep. Chem., Wake For. Univ., Winston-Salem, NC,

DOCUMENT TYPE:

J. Org. Chem. (1992), 57(15), 4309-12 CODEN: JOCEAH; ISSN: 0022-3263 Journal English

LANGUAGE:

Thermolysis of tert-Bu 2-alkoxy-1-vinyloyclopropane-1-carboxylates, e.g.,

(I (R = Et, Bu), resulted in the formation of .alpha.-ethylidenebutyrolactones, e.g. II. Similar transformations could be achieved using boron tribromide as catalyst. Alternatively, reactions induced by VOCI2(OET) resulted in dimeric or chlorinated .alpha.-ethylidene butyrolactones. The tert-Bu ester is necessary

these transformations as ring expansion involving the ester carbonyl

not obsd. with Me 2-ethoxy-1-vinylcyclopropane-1-carboxylate.

tert-Bu
2-phenyl-1-vinylcyclopropane-1-carboxylate underwent these
transformations
slowly, demonstrating that facile reactions occurred only when strong
donor-acceptor substituents were present.

IT 139858-05-80 142038-40-22 142038-48-09
Ri: RTT (Reactant); SNN (Synthetic preparation); PREP (Preparation)
(prepn. and ring expansion of, butyrolactone from)
RN 139955-05-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-butoxy-1-ethenyl-, 1,1-dimethylethyl
ester,

ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 40 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) L7 ANSWER 40 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

142038-40-2 CAPLUS Cyclopropanecarboxylic acid, 1-ethenyl-2-ethoxy-, 1,1-dimethylethyl trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

142038-48-0 CAPLUS Cyclopropanecarboxylic acid, 1-ethenyl-2-phenyl-, 1,1-dimethylethyl trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 142038-55-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 142038-55-9 CAPLUS
CN Cyclopropanecarboxylic acid, 1-ethenyl-2-phenyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS

1992:256002 CAPLUS 116:256002

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: 1,2,3-Trisubstituted cyclopropanes as

conformationally restricted peptide isosteres: application to the design and synthesis of novel renin inhibitors Martin, Etephen F., Austin, Richard E.; Oalmann, Christopher J., Baker, William R., Condon, AUTHOR (S):

Stephen L.;

DeLars, Ed; Rosenberg, Saul H.; Spins, Kenneth P.; Stein, Herman H.; et al. Dep. Chem. Biochem., Univ. Texas, Austin, TX,

CORPORATE SOURCE: 78712,

USA J. Med. Chem. (1992), 35(10), 1710-21 CODEN: JMCMAR; ISSN: 0022-2623 SOURCE:

DOCUMENT TYPE: LANGUAGE: GI Journal English

The 1,2,3-trisubstituted cyclopropanes I (R = CO2H; R1 = H, R2 = Et, CH2CHMe2, Ph, PhCH2; R1 = Et, CH2CHMe2, Ph, CH2Ph, R2 = H) are as the first members of a novel class of isosteric replacements for peptide linkages that are more generally represented by the dipeptide mimics

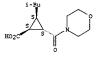
11 and III (R3, R4 = H, alkyl, aryl, hetaryl; W, X = H, OH, O; Y, Z = H, R4).

ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) These unique peptide surrogates are specifically designed to lock a section of a peptide backbone in an extended .beta.-strand conformation rmation (.vphi.-angle restriction) while simultaneously enforcing one of two specifically defined orientations for the amino acid side chain (.chi.l-angle restriction). Methods were first developed for the stereoselective, asym. synthesis of the trisubstituted cyclopropanes I (R - CO2H) by an efficient approach featuring chiral rhodium complexes catalyze the cyclization of the allylic diazoacetates (2)-RCH:CHCH202CCHN2 (2)-RCH:CHCH2OZCCHN2
to give the optically active lactones IV in up to .gtoreq.94%
enantiomeric
excess. Nucleophilic opening of the lactone ring of IV gave the
corresponding morpholine amides I (R = CH2OH). By exploiting tactics allowed for selective epimerization of one of the two functionalized chains on the cyclopropane nucleus, I (R = CH2OH) were transformed into the two series of diastereoisomeric morpholine amides I (R = CO2H). Epimerization of the morpholine amide group followed by Jones oxidn. of
the intermediate alcs. gave acids I (R1 = H). Alternatively, initial oxidn. of the primary alc. groups followed by selective,
base-catalyzed inversion .alpha. to the aldehyde function and then Jones oxidn.
gave the
diastereomeric dicarboxylic acid derivs. I (R2 = H). To evaluate the
efficacy of 1,2,3-trisubstituted cyclopropanes as rigid replacements .beta.-strand secondary structure in pseudopeptide ligands, I (R = CO2H)

were incorporated at the P3 subsite of the potential renin inhibitors I (R = CO-Q) by coupling with the corresponding tripeptide Q-H. A significant no. of these substances inhibited renin at nanomolar concns. On the basis of this preliminary test, 1,2,3-trisubstituted cyclopropanes do appear to constitute a viable new class of peptide mimics. Since the stereochem. at nochem. at search arbon on the cyclopropane ring may be altered, these novel replacements may also function as stereochem. probes to establish the conformation of pseudopeptide ligands bound to their macromol. conformation of pseudopeptide ligands bound to their macromol.

12 42842-79-5P 140926-07-4P 141042-64-0P
141042-65-1P 141042-66-2P 141042-67-3P
141042-68-4P 141042-78-9P 141042-70-8P
141042-71-1P 141042-72-0P 141042-73-1P
141042-74-2P 141042-73-3P 141042-76-4P
141042-74-2P 141042-78-6F
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and amidation of, with tripeptide analog, renin inhibitor

ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)



141042-66-2 CAPLUS Cyclopropanecarboxylic acid, 2-(4-morpholinylcarbonyl)-3-phenyl-, [1S-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-67-3 CAPLUS

Cyclopropanecarboxylic acid, 2-ethyl-3-(4-morpholinylcarbonyl)-, [1R-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-68-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-(2-methylpropyl)-3-(4-morpholinylcarbonyl)-, [1R-(1.slpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS RN 42842-79-5 CAPLUS CN Cyclopropanecarboxylic acid, 2,3-diphenyl-, (1.alpha.,2.beta.,3.beta.)-(9CI) (CA INDEX NAME)

Relative stereochemistry.

140926-07-4 CAPLUS Carlos (Callos (Carlos) (Callos (Callos) (Callos (Callos) (Callos (Callos) (Callos (Callos) (Callos (Callos (Callos) (Callos (

Absolute stereochemistry.

141042-64-0 CAPLUS Cyclopropanecarboxylic acid, 2-ethyl-3-(4-morpholinylcarbonyl)-, [15-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-65-1 CAPLUS NN 141042-03-1 GREDS
CN Cyclopropanearboxylic acid,
2-(2-methylpropyl)-3-(4-morpholinylcarbonyl), [15-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 141042-69-5 CAPLUS 141042-55-5 CAPLOS (Cyclopropanecarboxylic acid, 2-(4-morpholinylcarbonyl)-3-phenyl-, [1R-(1.slpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-70-8 CAPLUS 141042-70-8 CAPLUS Cyclopropanecarboxylic acid, -morpholinylcarbonyl)-3-(phenylmethyl)-, [1R-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

141042-71-9 CAPLUS Cyclopropanecarboxylic acid, 2-ethyl-3-(4-morpholinylcarbonyl)-, [1R-{1.alpha.,2.alpha.,3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

141042-73-1 CAPLUS
Cyclopropanecarboxylic acid, 2-(4-morpholinylcarbonyl)-3-phenyl-,
[1R-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 141042-74-2 CAPLUS
CN Cyclopropaneoarboxylic acid,
2-(4-morpholinylcarboxyl)-3-(phenylmethyl)-,
[1R-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-75-3 CAPLUS
Cyclopropanecarboxylic acid, 2-ethyl-3-(4-morpholinylcarbonyl)-,
[15-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 41 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 141042-76-4 CAPLUS
CN Cyclopropanecarboxylic acid,
2-(2-methylpropyl)-3-(4-morpholinylcarbonyl), [1S-{1.alpha.,2.beta.,3.beta.}]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

141042-77-5 CAPLUS Cyclopropanecarboxylic acid, 2-(4-morpholinylcarbonyl)-3-phenyl-, [15-(1.alpha, 2.beta., 3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 141042-78-6 CAPLUS
CN Cyclopropanecarboxylic acid,
2-(4-morpholinylcarboxyl)-3-(phenylmethyl)-,
[15-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

135588-56-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
135588-56-6 CAPLUS
Cyclopropanecarboxylic acid, 2-{4-morpholinylcarbonyl}-3-phenyl-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R[1.alpha.(1R\*,2R\*,3S\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 42 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1992:255709 CAPLUS MENT NUMBER: 116:255709

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

116:255709
A novel type of chiral diphosphine ligand, trans-2,3-bis(diphenylphosphino)-1-methyl-1-cyclopropanecarboxylic acid and asymmetric allylic alkylation by the use of its palladium complex Okada, Yoshiharu; Minami, Toru; Yamamoto, Tsutomu; Ichikawa, Junji
Dep. Appl. Chem., Kyushu Inst. Technol.,

AUTHOR (S):

CORPORATE SOURCE: Kitakyushu,

Ritakyushu,

804, Japan

SOURCE: Chem. Lett. (1992), (4), 547-50

CODEN: CMITAG; ISSN: 0366-7022

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(s): CASREACT 116:255709

AB Optically active trans-2,3-bis (diphenylphosphino)-1-methyl-1
cyclopropanecarboxylic acid was synthesized from trans-1,2bis (diphenylphosphinyl) ethene via resoln. of the racemic diphosphine

cxide. Asym. allylic alkylation of 2-cyclohexenyl acetate with

1-menthyl

sodiodiethylphosphonoacetate was achieved in good optical yields by

the

use of its palladium complex.

14160-66-49

RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and hydrolysis of)

141660-66-4 CAPLUS

Butanedioic acid, 2,3-bis (benzoyloxy)-, [S-(R\*,R\*)]-, compd. with (1.aipha.,2.aipha.,3.bta.)-(-)-1.1-dimethylethyl 2,3-bis (diphenylphosphinyl)-1-methylcypropanecarboxylate (1:1) (9CI)

INDEX NAME)

CM 1

Rotation (-). Absolute stereochemistry unknown.

ANSWER 42 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) CRN 17026-42-5 CMF C18 H14 O8 L7

Absolute stereochemistry. Rotation (+).

141610-77-7P 141610-78-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and redn. of)
141610-77-7 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphinyl)-1-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(-)- (9CI) (CA

Rotation (-). Absolute stereochemistry unknown.

141610-78-8 CAPLUS

Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphinyl)-1-methyl-, 1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

ANSWER 42 OF 139 CAPLUS COPYRIGHT 2002 ACS NAME) (Continued)

Rotation (+). Absolute stereochemistry unknown.

ΙT 141540-19-4P

SFN (Synthetic preparation); PREP (Preparation) (prepn. of and catalytic activity with palladium acetate, for

allylic alkylation)
141540-19-4 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
(1.alpha.,2.alpha.,3.beta.)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

17 141610-80-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of and catalytic activity with palladium, for asym.

allylic

alkylation)
141610-80-2 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
(1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

L7 ANSWER 42 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT 141540-17-2P

141540-17-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and resoln. of)
141540-17-2 CAPLUS
Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphinyl)-1-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

ΙT 141540-18-3P 141610-79-9P

RL: RCT (Reactant): SFN (Synthetic preparation); PREP (Preparation) (prepn. and sapon. of) 141540-18-3 CAPLUS Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-, 1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(-)- (9CI) (Cix INDEX

NAME)

Rotation (-). Absolute stereochemistry unknown.

141610-79-9 CAPLUS

Cyclopropanecarboxylic acid, 2,3-bis(diphenylphosphino)-1-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA

ANSWER 43 OF 139 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:235109 CAPLUS 116:235109

DOCUMENT NUMBER: TITLE: Bis(oxazolines) as ligands for self-organizing chiral

coordination polymers. Structure of copper(I)

cataysts

for enantioselective cyclopropanation of olefins Evans, David A.; Woerpel, Keith A.; Scott, AUTHOR (S):

Michael J. CORPORATE SOURCE: Dep. Chem., Harvard Univ., Cambridge, MA, 02138,

USA SOURCE: Angew. Chem. (1992), 104(4), 439-41 (See also

Angew.

Chem., Int. Ed. Engl., 1992, 31(4), 430-2) CODEN: ANCEAD; ISSN: 0044-8249

DOCUMENT TYPE: LANGUAGE: GI Journal German

The crystal structure of the complexation product of Cu triflate with bis(oxazoline) I was studied, and the soln. structure of the complex

examd. by spectral methods. The Cu-I complex exists as a coordination polymer and can catalyze the enantioselective cyclopropanation of styrene

ene
by N2CHCO2Et.
34702-96-0P 34702-97-1P 34716-60-4P
REL RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation)
(prepn. and sapon. of)
34702-96-0 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,2S)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

34702-97-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)- (9CI)

L7 ANSWER 43 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) INDEX NAME)

Absolute stereochemistry. Rotation (-).

34716-60-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)- (9CI) INDEX NAME)

Absolute stereochemistry. Rotation (-).

3471-10-1P 23020-15-7P 48126-51-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
3471-10-1 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (-).

RN CN NAME) 23020-15-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (15,28)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

48126-51-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, (1R,25)- (9CI) (CA INDEX NAME)

L7 ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:214743 CAPLUS
DOCUMENT NUMBER: 116:214743
TITLE: Process for the preparation of pyrethroid derivatives

from phenoxybenzaldehyde and vinyldimethylcyclopropanecarbonyl chloride derivatives. Botar, Sandor; Szekely, Istvan; Bertok, Bela;

INVENTOR (S):

Antal: Hidasi, Gyorgy: Zoltan, Sandor: Hajimichael.

PATENT ASSIGNEE(S): Janis; Rapi, Andras; Lindwurm, Ferenc; et al. Chinoin Gyogyszer es Vegyeszeti Termekek Gyara

Hung. PCT Int. Appl., 22 pp. CODEN: PIXXD2 Patent SOURCE:

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9202492 W: GB	A1	19920220	WO 1990-HU53	19900727
GB 2251621 GB 2251621	A1 B2	19920715 19940406	GB 1992-5920	19920318
PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI			1990-HU53	19900727

AB The invention relates to the prepn. of pyrethroid derivs. of high purity suitable for controlled crystn. Pyrethroids of general formula I (A Cl, Br, Me, Y = H, F, Cl; wavy line means R resp. S configuration) are obtained by acylation of cyanohydrins II with acid chlorides III. II are

L7 ANSWER 43 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) prepd. from 3-Pho-4-YC6H3CHO by reaction of alkali cyanide in water

prepd. from 3-PhO-4-YCGH3CHO by reaction of alkali cyanide in water 19 an amine as catalyst, whereby benzaldehyde is added to 7-94 aq. alkali cyanide in the presence of 0.15-0.25 mol equivs. of amine. The cyanohydrin formed in the reaction mixt. is acylated in statu nascens parallel to the formation of cyanohydrin with an acid chloride and the cypermethrin emulsion obtained is extd. with an apolar solvent. 59042-49-8, cis-3-(2,2-Dichloroethenyl)-2,2-dimethylcylopropanecarboxylic acid 59042-50-1 63538-10-3 63597-73-9
RI: RCT (Reactant) (chlorination and acylation by, of phenoxybenzaldehyde derivs.) 59042-49-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (18,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,3S)-rel- (9CI) (CA INDEX NAME)

63538-10-3 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dibromoethenyl}-2,2-dimethyl-,(RR,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

63597-73-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

64312-65-8P 64312-66-9P 64312-68-1P
64312-69-2P 65731-83-1P 65731-84-2P
65732-07-2P 66841-24-5F 72204-43-4P
72204-44-5P 63860-31-5F 63860-32-6F
141041-32-9P 141041-33-0P 141041-34-1P
141041-32-9P 141041-33-0P 141041-34-1P
RL: SPN (Synthetic preparation), PREP (Preparation)
(high-yield one-pot prepn. of)
64312-65-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX) ΙŤ

Absolute stereochemistry.

64312-66-9 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cyano(3-phenoxyphenyl)methyl ester, [1R-[1.alpha.(S\*),3.alpha.]]-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

64312-68-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cyano(3-phenoxyphenyl)methyl ester, [1R-[1.alpha.(R\*),3.beta.]]-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65732-07-2 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, (S)-cyano(3-phenoxyphenyl)methyl ester, {1R,3S}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

66841-24-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(R)-cyano(3-phenoxyphenyl)methyl ester, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

72204-43-4 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(5)-cyano(3-phenoxyphenyl)methyl ester, (15,35)- (9Cl) (CA INDEX

Absolute stereochemistry.

ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

64312-69-2 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-cyano(3-phenoxyphenyl)methyl ester, [1R-[1.alpha.(R\*),3.alpha.]]-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

65731-83-1 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,(R)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX

Absolute stereochemistry.

65731-84-2 CAPLUS Cyclopropancarboxylic acid, 3-(2,2-dichlorosthenyl)-2,2-dimethyl-, (3)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

72204-44-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(R)-cyano(3-phenoxyphenyl)methyl ester, (15,3S)- (9CI) (CA INDEX

Absolute stereochemistry.

83860-31-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,(5)-cyano(3-phenoxyphenyl)methyl ester, (15,3R)- (9CI) (CA INDEX

Absolute stereochemistry.

83860-32-6 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1S,3R)- (9CI) (CA INDEX

Absolute stereochemistry.

141041-32-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,cyano(3-phenoxyphenyl)methyl ester, [15-[1.alpha.(5\*),3.beta.]]-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

141041-33-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (5)-cyano(3-phenoxyphenyl)methyl ester, (15,35)- (9CI) (CA INDEX

141041-34-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cyano(3-phenoxyphenyl)methyl ester, [1S-{1.alpha.(R\*),3.alpha.]]-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 45 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:83242 CAPLUS
DOCUMENT NUMBER: 116:83242
TITLE: alpha-Hydroxy esters as inexpensive chiral auxiliaries in rhodium(II)-catalyzed

cyclopropanations

with vinyldiazomethanes
Davies, Huw M. L.; Cantrell, William R., Jr.
Dep. Chem., Wake Forest Univ., Winston-Salem, NC,
27109, USA
Tetrahedron Lett. (1991), 32(45), 6509-12
CODEN: TELEXY; ISSN: 0040-4039
Journal
English
CASREACT 116:83242 AUTHOR(S): CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB High levels of asym. induction were achieved in rhodium(II)-catalyzed cyclopropanations with chiral vinyldiazomethanes.

(R)-(-)-Pantolactone is
the most effective chiral auxiliary, but other .alpha.-hydroxy

rs also give reasonable levels of diastereoselectivity. Thus, reaction of trans-PhCH:CHC(N2)COR (R = chiral auxiliary) with styrene in the

presence of Rh2L4 (L = O2CMe) in refluxing CH2Cl2 afforded cyclopropanes I and II

and II

(91% yield, 89% de).

IT 138770-18-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and Curtius rearrangement of)

RN 138770-18-0 CAPLUS

CN 1,1-Cyclopropanedicarboxylic acid, 2-phenyl-,

mono(tetrahydro-4,4-dimethyl
2-oxo-3-furanyl) ester, [15-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 44 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

141041-35-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,cyano(3-phenoxyphenyl)methyl ester, [15-[1.alpha.(5\*),3.alpha.]]-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 45 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

138770-14-6F 138812-36-9P RL: SFN (Synthetic preparation); PREP (Preparation) (prepn. and conversion of, to Me ester) 138770-14-6 CAPLUS

1381/0-14-6 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 2-methoxy-1-methyl-2-oxoethyl ester, [IR-[1.alpha.(5\*),2.beta.]]-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

138812-36-9 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-,
2-methoxy-1-methyl-2-oxoethyl ester, [15-[1.alpha.(R\*),2.beta.]]-

(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

138770-15-7P 138770-17-9P 138812-37-0P RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. of)

L7 ANSWER 45 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 138770-15-7 CAPLUS
CN Benzeneacetic acid,
.alpha.-[[[2-phenyl-1-(2-phenylethenyl) cyclopropyl]car
bonyllowyl-, methyl ester (SCI) (CA INDEX NAME)

138770-17-9 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

RN 138812-3/-0 CN Cyclopropanecarboxylic con-ester, (1R-trans) - (9CI) (CA INDEX NAME) 138812-37-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-1-(2-phenylethenyl)-, methyl

Absolute stereochemistry.
Double bond geometry unknown.

L7 ANSWER 46 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) are prepd. I may also be used to treat erosive gastritis, inflammatory bowel disease, prevention of SRA-release (no data). To a suspension

[(7-chloroquinolin-2-yl)methyl]triphenylphosphonium bromide in THF

added BuLi, the reaction mixt. was stirred at -78.degree. and Me 2-[3-[2-(methoxycarbonyl)ethylthio]-3-(3-formylphenyl)propyl)benzoate [prepn. from 3-(BrCH2)C6H4CN given] added, the mixt. warmed to room

temp.
to give I (R1 = 7-Cl; Y = CH:CH; A = HO2C(CH2)2S; B =
2-(HO2C)C6H4CH2CH2)
(II) as the di-He ester, which in THF and MeOH was sapond. to give
II.2Na

salt. A capsule, injectable suspension and tablet formulations

salt. A capsule, injectable suspension and tablet formulations comprising I are given. Pharmaceutical compn. of I may comprise an addnl. active

ve
ingredient such as nonsteroidal antiinflammatory drug, peripheral
analgesic, cyclooxygenase inhibitor, etc.
133772-30-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, on prepn. of leukotriene antagonists)
133772-30-2 CAPLUS
Cyclopropanecarboxylic acid, 1-(mercaptomethyl)-, ethyl ester (9CI)

INDEX NAME)

133768-68-0P 133768-70-4P 133771-77-4P 133771-79-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic

thetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as leukotriene antagonist) 133768-68-0 CAPLUS

Cyclopropanecarboxylic acid, 1-[[[1-[3-[(7-chloro-2-

L7 ANSWER 46 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:656016 CAPLUS
DOCUMENT NUMBER: 115:256016
ITILE: 115:256016
Preparation of diarylstyrylquinoline diacids as leukotriene antagonists
Prompt Robert N. 1 Gauthier, Jacques Yves, Zamboni, Robert Relley, Michel L.
PATENT ASSIGNEE(S): Merck Frost Canada, Inc., Ivory Coast
Eur. Pat. Appl., 144 pp.
CODEN: EPXXDW
DOCUMENT TYPE: English
FAMILY ACC. NUM. COUNT: 2

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA'	TENT N	ю.		KIND	DATE			API	PLIC	ATI	ON NO	ο.	DATE	
	39981			A1	19901	1128		EP	199	0-3	05640	)	19900	523
EP	39981	.8		В1	19950	0816								
	R:	AT, I	BE, C	H, D	E, DK,	ES,	FR, C	В, (	GR,	IT,	LI,	LU,	NL,	SE
US	51048	82		Α	19920	0414		US	199	0-5	27236	5	19900	522
CA	20173	76		AA	19901	1124		CA	199	0-21	1737	76	19900	523
NO	90023	01		Α	19901	1126		NO	199	0-2	301		19900	523
AU	90558	11		A1	19901	1213		AU	199	0-5	5811		19900	523
	90039			Α	19910	327		ZA	199	0-3	983		19900	523
	03072			A2	19910	327		JP	199	0-13	32754	1	19900	524
	07103			B4	19951	1108								
US	52043	58		Α	19930	1420		US	199	2-8	18598	3	19920	109
PRIORIT	Y APPL	N. II	FO.:				US	198	39-3	564	78		19890	1524
							US	198	37-1	250	50		19871	125
							US	198	88-2	751	50		19881	122
							US	199	90-5	272	36		19900	522

OTHER SOURCE(S): MARPAT 115:256016

AB Title compds. I [R1 = 7-C1, 7-MeO, 6-F3C, 7-F3C, 6-MeSO2, H, 6,7-C12; Y =

CH:CH, CH2CH2, CH2O, CHMeCH2; A = HO2C(CH2)2S, Me2NCO(CH2)2S, 3-(HO2C)C6H4S, Me3CNRCO(CH2)2S, 4-carboxy-2-pyridyl, [(1-adamantylamino)carboxylethyl]thio, 1-tetrazol-5-ylmethylthio, etc.; B

2-(HO2C)C6H4CH2CH2, 3-(HO2C)C6H4, 5-carboxy-2-thiophenyl, HO2CCH2CHMe(CH2)2, 6-carboxy-2-pyridyl, 2-(Me3CNHCO)C6H4S, 3-[(1-tetrazol-5-yl)methyl)phenyl, etc.] and their salts, useful as inhibitors of leukotriene biosynthesis, antiasthmatic, antiallergic, antiinflammatory, and cytoprotective agents (no data, assays ribed) described),

ANSWER 46 OF 139 CAPLUS COPYRIGHT 2002 ACS

133768-70-4 CAPLUS

Cyclopropanecarboxylic acid, 1-[[[1-[3-[2-(7-chloro-2-

quinolinyl)ethyl]phenyl]-3-[2-[(dimethylamino)carbonyl]phenyl]propyl]thio]
methyl]- (9CI) (CA INDEX NAME)

133771-77-4 CAPLUS Cyclopropanecarboxylic acid, 1-[[[1-[3-[(7-chloro-2-

quinoliny1)methoxy]pheny1]-3-[2-[(dimethylamino)carbonyl]phenyl]propyl]thi
o]methyl]-, sodium salt (9CI) (CA INDEX NAME)

L7 ANSWER 46 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

● Na

133771-79-6 CAPLUS Cyclopropanecarboxylic acid, 1-[[[1-[3-[2-(7-chloro-2-

quinolinyl)ethyl]phenyl]-3-[2-((dimethylamino)carbonyl]phenyl]propyl]thio]
methyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

L7 ANSWER 47 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

136598-13-5 CAPLUS

To 1003e175 CAR LOS
CAR CONTROL CONTROL CONTROL
CAR CONTROL CONTROL
CAR C

Absolute stereochemistry.
Double bond geometry as shown.

L7 ANSWER 47 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:583446 CAPLUS
DOCUMENT NUMBER: 115:183446
TITLE: XXXVII: Regio- and stereocontrol in the rhodium-catalyzed hydroformylation of some alkenylphosphines
Hee: Jackson, W. Roy; Perlmutter, Patrick; Suh, Guem

AUTHOR(S): Hee;

Hee;

Tasdelen, E. Elizabeth
Dep. Chem., Monash Univ., Clayton, 3168, Australia
SOURCE:
Aust. J. Chem. (1991), 44(7), 951-66
CODEN: AVCTAS; ISSN: 0004-9425

DOCUMENT TYPE:
JOURNAL
LANGUAGE:
English
OTHER SOURCE(S):
CASREACT 115:183446
AB Good to excellent regiocontrol can be obtained for the internal product of rhodium-catalyzed hydroformylation of a range of alkenylphosphines.

hydroformylation of CH2:CHCH2CH2PPh2 in the presence of tetrakis(acetato)dirhodium gave 100% HOCH2CHMeCH2CH2PPh2. Excellent stereo- as well as regiocontrol can also be obtained for reactions of

cyclic alkenylphosphines. 87725-85-7

87725-85-7
RL: RCT (Reactant)
(esterification by, of diphenylphosphorylmethylbutanol)
87725-85-7 CAPLUS
Cyclopropanecarboxylic acid,
-chloro-3,3-triflucoro-1-propenyl)-2,2dimethyl-, [1R-[1.alpha.,3.alpha.(E)]]- (9CI) (CA INDEX NAME)

3- (2-

Absolute stereochemistry.
Double bond geometry as shown.

IT 136492-51-8P 136598-13-5P
RI: SPM (Synthetic preparation); PREP (Preparation) (prepn. of)
RN 136492-51-8 CAPIUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimple (preparation) (preparation)

Absolute stereochemistry. Double bond geometry as shown.

L7 ANSWER 48 OF 139 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

CAPLUS COPYRIGHT 2002 ACS 1991:514036 CAPLUS 115:114036 CAPLUS Hetal catalyzed carbonylation of gem-dibromocyclopropanes Grusbin, Vladimir V., Alper, Howard Ottawa-Carleton Chem. Inst., Univ. Ottawa, AUTHOR(S): CORPORATE SOURCE: Ottawa, ON,

KIN 6N5, Can.
Tetrahedron Lett. (1991), 32(28), 3349-52
CODEN: TELEAY; ISSN: 0040-4039
JOURNAL
English
CASREACT 115:114036

SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

The first examples of the catalytic carbonylation of gem-dibromocyclopropanes is described, using cobalt and nickel salts as catalysts under phase transfer conditions. Thus, 1,1-dibromo-2-phenylcyclopropane (I) in PhMe was added to a mixt. of

KOH, CoCl2, Ni(CN)2.4H20, KCN, and PEG-400 in PhMe that had been pretreated with CO-H2 and the mixt. heated under CO-H2 to give 72% a

1:1 mixt. of the cis- and trans-phenylcyclopropanecarboxylic acids II. 5365-17-3
RL: RCT (Reactant)
(cobalt-nickel-catalyzed phase transfer carbonylation of) 5365-17-3 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dibromo- (6CI, 7CI, 8CI, 9CI) (CA IТ

INDEX NAME)

ΙT

939-89-9P 939-90-2P 5682-61-1P 5861-31-4P 7150-12-1P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 939-89-9 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX NAME) 939-90-2 CAPLUS

Relative stereochemistry.

5682-61-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1R,2S)-rel-RN CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 5861-31-4 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1R,2R)-rel-(SCI) (CA INDEX NAME)

Relative stereochemistry.

7150-12-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl- (6CI, 7CI, 8CI, 9CI) (CA NAME)

L7 ANSWER 49 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
115150231 CAPLUS
11

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB To det. what conformations of L-glutamate (I) activate different receptors
in the mammalian central nervous system, four diastereomeric
L-2-(carboxycyclopropyl)glycines L-II, which are conformationally constrained analogs of the extended and folded conformers of I, were synthesized and subjected to neurophysiol. assay. Compds. L-II were efficiently synthesized from chiral amino acids. Cyclopropanation of (5)-H2C:CHCH(NHEOC)CH2OSiMe2Me3 (III, Boc = Me3COZC) gave intermediates

Intermediates

for the synthesis of all four diastereomers. Stereoselective
cyclopropanation of both the .alpha.,.beta.-unsatd. .gamma.-lactam
IV and

nd the .delta.-lactone V gave precursors of (25,1'5,2'R)-II and (25,1'R,2'S)-II, resp. Neurophysiol. assays of L-II performed with

newborn rat spinal cord demonstrated that the compds. induced a variety of

ety or depolarizing effects. The results of the assays strongly suggested that

the N-methyl-D-aspartic acid (NMDA) receptor is activated by the

ed conformer of I and that the extended conformer of I activates the metabotropic receptor. The four analogous D-2- (carboxycyclopropyl)glycines D-11, prepd. from (R)-11I, were NMDA agonists. 17857-93-99 117857-94-0P 117857-95-1P 117857-96-2P 125412-10-4P 125412-11-5P 125412-12-6P 125412-13-7P

L7 ANSWER 48 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RI: PRF (Properties); SPN (Synthetic preparation); PREF (Preparation) (prepn. and activity of, toward glutamate neurotransmitter receptors)
RN 117857-93-9 CAPLUS
CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.S,15,2S)-(9CI) (CA INDEX NAME)

(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 117857-94-0 CAPLUS CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.5,1R,2R)-(SCI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN CN (9CI) 117857-95-1 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.S,1S,2R)-(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

117857-96-2 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.S,1R,2S)-(CA INDEX NAME)

Absolute stereochemistry

ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 125412-10-4 CAPLUS
CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,1R,2R)-(9CI)

(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 125412-11-5 CAPLUS CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,15,2S)-(SCI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 125412-12-6 CAPLUS CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,1R,2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 125412-13-7 CAPLUS Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,15,2R)-(9CI) (CA INDEX NAME)

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethyleilyl)dxy]ethyl]-, ethyl ester,
[1S-[1.alpha.,2.beta.(R\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 124151-72-0 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]-, ethyl ester,
[lR-[1.alpha.,2.beta.(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} \text{EtO} & \text{R} & \text{H} & \text{Me} & \text{Me} \\ \hline & S & S & S & Bu-t \\ \hline & OBu-t & & \\ \end{array}$$

134419-12-8 CAPLUS CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2[(1,1-dimethylethyl)dimethylsilyl]oxylethyl]-, methyl ester,
[1S-[1.alpha.,2.beta.(R\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

IT 117747-68-9F 117857-90-6F
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. and sequential Jones oxidn. and deblocking of)
RN 11774-68-9 CAPIUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1.-dianethylethoxy)carboxyl]amino]-2hydroxyethyl]-, ethyl ester, [1S-[1.alpha.,2.beta.(R\*)]]- (9CI) (CA
INDEX
NAME)

Absolute stereochemistry.

RN 117857-90-6 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,-dimethylethoxy)carbonyl]amino]-2hydroxyethyl]-, ethyl ester, [1R-[1.alpha.,2.beta.(S\*)]]- (9CI) (CA

Absolute stereochemistry.

124085-73-0P 124151-72-0P 134419-12-8P 134419-15-1P 134419-16-2P 134525-19-2P 134525-22-7P 134525-23-8P 134525-27-2P RL: SPN (Synthetic preparation); PREP (Preparation) (prepa. of) 124085-73-0 CAPLUS

ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 134419-15-1 CAPLUS 3-Oxazolidinecarboxylic acid, 4-[2-(methoxycarbonyl) cyclopropyl]-2,2-dimethyl-1,1-dimethylethyl ester, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

 $134419-16-2 \quad CAPLUS \\ 3-0xazolidine carboxylic acid, \ 4-[2-(ethoxycarbonyl) cyclopropyl]-2, 2-dimethyl-1, 1,1-dimethylethyl ester, [1S-[1.alpha.(R*),2.beta.]]- (9CI) (CA INDEX NAME)$ 

Absolute stereochemistry

RN 134525-19-2 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethylailyl]oxy]ethyl]-, methyl ester,
[1R-[1.alpha.,2.beta.(5\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

134525-22-7 CAPLUS 3-0xazolidinecarboxylic acid, 4-[2-(methoxycarbonyl)cyclopropyl]-2,2-dimethyl-, 1,1-dimethylethyl ester, [1R-[1.alpha.(5\*),2.beta.]]- [9CI) (CA INDEX NAME)

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

134525-23-8 CAPLUS

3-Oxazolidinecarboxylic acid, 4-[2-[ethoxycarbonyl]cyclopropyl]-2,2-dimethyl-, 1,1-dimethylethyl ester, [1R-[1.alpha.(5\*),2.beta.]]-(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

RN 134525-27-2 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2hydroxyethyl]-, methyl ester, [1R-[1.alpha.,2.alpha.(S\*)]]- (9CI)

INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 50 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:449133 CAPLUS
DOCUMENT NUMBER: 115:49133
TITLE: Method for preparation of insecticidal and acaricidal

.alpha.-cyano-3-phenoxybenzyl 3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate esters Tichy, Milos; Zavada, Jiri; Stibor, Ivan; Votava, Vladimir; Vesely, Ivan; Dolansky, Vladimir;

INVENTOR (S):

Zdenek; Smid, Ivan; Mostecky, Jiri Czech. Czech., 5 pp. CODEN: CZXXA9 Patent Czech

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE

APPLICATION NO. DATE B1 19900314 CS 1988-5707 CS 268475 19880819 GI

The racemic ester (I) and its optical or geometrical isomers, active

insecticides and acaricides (no data), were prepd. by esterification of

the parent cyclopropanecarboxylate alkali metal salts (II; R = 0-M+;

alkali metal), preferably with the cis-configuration on the

cyclopropane ring, with 3-PhOC6H4CH(CN)OSO2C6H4Me-4 (III) in a inert org. solvent

a solvent-H2O mixt., optionally in the presence of a quaternary

ammonium sait as phase-transfer catalyst at 20-80.degree.. Thus, 2 mL MePh, 725 mg 111, and 15 mg PhCH2N+EE3 Br-were added to a soln. of

L7 ANSWER 49 OF 139 CAPLUS COPYRIGHT 2002 ACS Absolute stereochemistry. (Continued)

RN 117857-92-8 CAFLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy]carbonyl]amino]-2hydroxyethyl]-, ethyl ester, [1S-[1.alpha.,2.alpha.(R\*)]]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

ANSWER 50 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) racemic II (R = OH) in 1.1 mL 1.95M aq. NaOH and the mixt was stirred vigorously 6 h at 70.degree. to give 842 mg I as a yellowish oil comprising an approx. equimolar diastereoisomeric mixt. 72257-63-7 72257-64-8

72257-63-7 72257-64-8
RI: RCT (Reactant)
(esterification of, by phenoxybenzyl tosylate deriv., in prepn. of insecticide and acaricide)
72257-63-7 CAPLUS
72257-64-8 CAPLUS
134454-38-99 134677-68-29 134677-71-79
134657-72-89
RI: AGR (Agricultural use), BAC (Biological activity or effector, ot

except
adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(prepn. of, as insecticide and acaricide)
RN 13445-38-9 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chlor-0-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(3-phenoxyphenyl)methyl ester,
[1.alpha.(S\*),3.alpha.](9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

RN 134677-68-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1.alpha.(R\*),3.beta.](9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

RN 134677-71-7 CAPLUS RN 134677-72-8 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

L7 ANSWER 50 OF 139 CAPLUS COPYRIGHT 2002 ACS dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1.alpha.(5),3.beta.]- (9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry. Double bond geometry unknown.

L7 ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) desilylation provides the aminocyclopropane VII in good overall yield.

; thus demonstrating that cyclopropanes like VI may serve as useful synthetic intermediates. 132592-83-79 132582-85-99 132592-87-1p

RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (pre Cyclopropanecarboxylic acid, 2-(aminomethyl)-, methyl ester, hydrochloride, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

● HC1

132592-85-9 CAPLUS Cyclopropanecarboxylic acid, 2-(aminomethyl)-2-methyl-, methyl ester, hydrochloride, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

• HC1

132592-87-1 CAPLUS Cyclopropanecarboxylic acid, 2-(aminomethyl)-2-methyl-, methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c|c} \text{Me} & \\ \text{R} & \text{R} \end{array} \quad \text{OMe}$$

132592-79-1P 132592-80-4P RL: RCT (Reactant); SPN (Synthetic preparation); FREP (Preparation)

L7 ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:409263 CAPLUS DOCUMENT NUMBER: 115:9263 An afficial and afficial a

115:9263 An efficient route to GABA-analogous amino acids: cyclopropanation of N-silylated allylamines and enamines

enamines Paulini, Klaus; Reissig, Hans Ulrich Inst. Org. Chem., Tech. Hochsch. Darmstadt, AUTHOR(S): CORPORATE SOURCE: Darmstadt,

D-6100, Fed. Rep. Ger. Liebigs Ann. Chem. (1991), (5), 455-61 CODEN: LACHDL; ISSN: 0170-2041 Journal SOURCE:

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S): German CASREACT 115:9263

AB N-Silylated allylamines R2C:CR1CH2N(SiMe3)2 (I; R = H, R1 = H, Me; R = Me, R1 = H) are effectively transformed into Me cyclopropanecarboxylates

R1 = H) are effectively transformed into Me cyclopropanecarboxylate
II by
Me diazoacetate under Rh2(OAc)4 catalysis. Derivs. II (R = H) are
smoothly converted into trans substituted amino acids III and to
bicyclic
.gamma.-lactams IV. Thus, the pharmacol. interesting
.gamma.-mainobutyric
acid (GABA) analog III (R1 = H) is now available in few steps.
Photochem.

chem. and thermal Fe(CO)5-induced hydrogen shift converts allylamine

and thermal retools and the derivation of the state of th

enamine
(E)-V (R1 = H) be cyclopropanated with Me diazoacetate under Cu

(E)-V (R1 = H) be cyclopropanated with ne clarity catalysis to afford the desired cyclopropane derivs. VI in good yield, the other enamines are rather unreactive towards the carbenoid. Use of an optically active catalyst provides VI with an enantiomeric excess of 56% (cis) and 20% (trans). Acid-induced ring cleavage of VI gives the .beta.-formyl ester ONCCHMECH2COZMe, and redn. of VI followed by

ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Masses SI to 139 Carbos Conflict 2002 AC (preps. and desilylation of) RN (132592-79-1 CAPLUS) (Props. CAPLUS)

Relative stereochemistry.

1 132592-80-4 CAPLUS (Oylopropanecarboxylic acid, [{bis(trimethylsilyl)amino]methyl]-2-methyl-, methyl ester, trans- (9CI) (CA INDEX NAME)

IT

132592-84-8P 132592-86-0P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation) (prepn. and sapon. of) 132592-84-8 CAPLUS Cyclopropanecarboxylic acid, 2-(aminomethyl)-, methyl ester, hydrochloride, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

• HC1

132592-86-0 CAPLUS

Cyclopropanecarboxylic acid, 2-(aminomethyl)-2-methyl-, methyl ester, hydrochloride, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

#### ● HC1

82259-99-2P 82260-00-2P 132592-81-5P 132592-82-6P 132592-90-6P 132696-26-5P 132696-27-6P 132696-28-7P IT RL: SPN (Synthetic preparation); PREP (Preparation) RL: SPN (synthetic preparation), PREP (Preparation)
(prepn. of)
RN 82259-99-2 CAPLUS
RN 82250-00-2 CAPLUS
RN 132592-81-5 CAPLUS
CN Cyclopropaneoarboxylic acid,
3-[[bis(trimethylsi)y] amino[methyl]-2,2dimethyl-, methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 132592-82-6 CAPLUS
CN Cyclopropanecarboxylic acid,
3-[[bis(trimethyls:1yl)amino]methyl]-2,2dimethyl-, methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

132592-90-6 CAPLUS Cyclopropanecarboxylic acid, 2-(aminomethyl)-2-methyl-, trans- (9CI) INDEX NAME)

ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

132592-91-7F 132696-25-4F RL: SPN (Synthetic preparation); PREP (Preparation) (prepn., hydrolysis-ring cleavage, and hydride redn. of) 132592-91-7 CAPLUS

132592-91-7 CAPLUS Cyclopropanecarboxylic acid, 2-{bis(trimethylsilyl)amino]-3-methyl-, methyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

## Relative stereochemistry.

132696-25-4 CAPLUS
Cyclopropanecarboxylic acid, 2-[bis(trimethylsilyl)amino]-3-methyl-,
methyl ester, (1.alpha.,2.beta.,3.alpha.)- (9CI) (CA INDEX NAME)

### Relative stereochemistry.

L7 ANSWER 51 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

132696-26-5 CAPLUS
Cyclopropanecarboxylic acid, 2-[bis(trimethylsilyl)amino]-3-methyl-,
methyl ester, (1.alpha.,2.beta.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

132696-27-6 CAPLUS 132696-28-7 CAPLUS 132592-77-9P

methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

132592-78-OP
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn., desilylation, and desilylation-sapon. of)
132592-78-O CAPLUS
Cyclopropanecarboxylic acid, 2-[[bis(trimethylsilyl)amino]methyl]-,

methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 52 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:228701 CAPLUS DOCUMENT NUMBER: 114:228701

DOCUMENT NUMBER: TITLE:

Tandem cyclization-cycloaddition reaction of rhodium

carbenoids. Studies dealing with the geometric requirements of dipole formation Padwa, Albert; Chinn, Richard L.; Hornbuckle,

AUTHOR (S):

F.; Zhang, Zhijia J.
Dep. Chem., Emory Univ., Atlanta, GA, 30322, USA
J. Org. Chem. (1991), 56(10), 3271-8
CODEN: JOCEAH: ISSN: 0022-3263 CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S):

English CASREACT 114:228701

AB The carbenoid intermediate derived by the treatment of several 1-diazobutanediones with Rh(II) acetate undergoes ready transannular cyclization onto the neighboring keto group to give 5-membered ring carbonyl ylides. The dipole derived from EtOZCCMMcOCRN2 (I; R = H) underwent a rapid proton transfer, producing 5-ethoxy-4-methyl-3-(ZH)-furanone. When the position adjacent to the diazo carbonyl group is blocked with 2 substituent groups, however, smooth 1,3-dipolar cycloaddn.

occurs. Thus, Rh-catalyzed cyclization of I (R = Me) and subsequent reaction with MeoZCC.tpibond.COZMe gave cycloadduct II. The obsd.

(FMO)

theory. A type II FMO interaction is involved since carbonyl ylides possess one of the smallest HOMO-LUMO energy gaps of common

coed a mixt. of products. In addn. to the expected cycloadduct, a product derived from the bimol. addn. of the rhodium carbenoid to benzene was obtained. The formation of a mixt. of products in this case suggests

entropic factors have sufficiently retarded the rate of intramol. cyclization so as to allow the bimol. reaction with benzene to occur.

observable cycloadduct was obtained from the diszohexanedione system, thereby indicating that the longer tether was sufficient to shut down dipole formation.

3697-66-3, 1,1-Cyclopropanedicarboxylic acid monoethyl ester RE: RCT (Reactant)

L7 ANSWER 52 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (diazomethylation of)
RN 3697-66-3 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, monoethyl ester (8CI, 9CI) (CA CN , INDEX NAME) \_\_CO2H -OEt

56172-71-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and diazomethylation of) 56172-71-5 CAPLUS
Cyclopropanecarboxylic acid, 1-acetyl- (9CI) (CA INDEX NAME) Λ \_ CO2H

ΙT 133374-46-6P : SPN (Synthetic preparation); PREP (Preparation) (prepn. and rhodium-catalyzed cyclization and cycloaddn. reaction ٥f.

with acetylenedicarboxylate)
133374-46-6 CAPLUS
Cyclopropanecarboxylic acid, 1-(diazoacetyl)-, ethyl ester (SCI) (CA
INDEX NAME)

ANSWER 53 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 53 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:207550 CAPLUS TITLE: Preparation of trans-chrimvemtor(s): Preparation of trans-chrimvemtor(s): Hagitani, Kojuv Fukao, Mi

Preparation of trans-chrysanthemic acids Freparation of trains-only-paintnenic actors
Augustano, Gohfu
Suzukano, Gohfu
Sumitono Chemical Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JROCAF

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent Japanese 1

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A2 19910205 B2 19990927 MARPAT 114:207550 JP 03027343 JP 1989-161293 19890623 JP 2952674 OTHER SOURCE(S):

Me2C=CH CO2R T

The title compds. trans-I (R = H, C1-20 alkyl, cycloalkyl, aralkyl), useful as intermediates for insecticidal pyrethroids, are prepd. by treatment of cis-l or its mixts. with trans-I with HEr in the presence of .gtoreq.1/500 mol (per mol I) C. A soln. of HBr/AcOH in toluene was added

.gtoreq.1/500 mol (per mol I) O. A soln. of HBr/AcCH in toluene was added dropwise to 10 g cis-I (R = H) (II) in toluene under O/N (1:9) at atm. pressure (free space vol. of a flask 100 mL) at 20.degree. over 30 min to give 9.6 g I with cis/trans ratio 3.9:96.1, vs. 11.7:88.3 for a control at O/N ratio 1:99.

IT 15259-78-6, cis-Chrysanthemic acid 15259-78-6D, cis-Chrysanthemic acid, esters RL: RCT (Reactant) (isometization of, hydrogen bromide and oxygen catalysts for) (15259-78-6 CAPLUS RN 15259-78-6 CAPLUS RN 15259-78-70-70P, trans-Chrysanthemic acid 1802-02-4P, trans-Chrysanthemic acid ethyl ester RL: SFN (Synthetic preparation); PREP (Preparation) (prepn. of, by catalytic isomerization) RN 827-90-7 CAPLUS RN 827-90-7 CAPLUS RN 1802-02-4 CAPLUS RN 1802-02-4 CAPLUS RN 1802-02-4 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl

L7 ANSWER 54 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:206628 CAPLUS DOCUMENT NUMBER: 114:206628 CAPLUS Preparation of cis- and trans-3-[2-(E/Z)-halo-3,3,3-

trihalo-1-propenyl]-2,2-dimethylcyclopropanecarboxylic

acid esters as insecticides
Hoare, John Harold
FMC Corp., USA
Brit. UK Pat. Appl., 45 pp.
CODEN: BAXXDU
Patent
English
1 INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE GB 2229181
GB 2229181
US 4960922
PRIORITY APPLM. INFO.:
OTHER SOURCE(S):
GI A1 B2 A 19900919 19920520 19901002 19901002 US 1989-323652 19890315 WARRAT 114:206628 1989-323652 19890315

AR Esters of the title acids (I; R, R1 = halo; R2 = H), useful as insecticides or intermediates of pyrethroid insecticides (no data),

prepd. by dehydrohalogenation of tetrahalopropyl analogs (II) with an alkali and/or alk. earth metal base in a polar aprotic anhyd.

246.0, CaO 44.0, and DBU 76.0 g in 2000 mL AcNMe2 was heated 22.25 h at

82-93.degree. to give 724 g product contg. 29.05 wt.% title ester (I; R -

R = F, R1 = C1, R2 = 2,6-C12C6H3CH2).

IT 78999-16-3D, esters
RL: RCT (Reactant)
(dehydrohalogenation of, in prepn. of insecticides)
RN 7899-16-3 CAPIUS
CN Cyclopropanecarboxylic acid,
3-(2,2-dichloro-3,3,3-trifluoropropy1)-2,2-dimethy1- (9CI) (CA INDEX NAME)

# 83376-80-1P 83376-81-2P 83376-82-3P 83376-83-4P 133521-60-5P 133521-61-6P 133521-62-7P 133521-63-8P RL: AGR (Agricultural use); BAC (Biological activity or effector, ΙT

Relative stereochemistry.
Double bond geometry as shown.

RN 83376-81-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, methyl ester, [1.alpha.,3.alpha.(Z)]- (9CI) (CA INDEX

Relative stereochemistry.
Double bond geometry as shown.

RN 83376-82-3 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

L7 ANSWER 54 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 133521-62-7 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,6-dichlorophenyl)methyl ester, [1.alpha.,3.alpha.(2)]-

(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

$$\begin{array}{c|c} & \text{Me} & \text{Me} & \text{Cl} \\ \hline & z & s & s \\ \hline \end{array}$$

RN 133521-63-8 CAPLUS
CN cyclopropanecarboxylic acid,
3-(2-chlor-03,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,6-dichlorophenyl)methyl ester, [1.alpha.,3.beta.(2)](971) (9CI)

(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

$$\begin{array}{c|c} & \text{Me} & \text{Me} & \text{Cl} \\ \hline & z & \text{R} & \text{S} \\ \end{array}$$

IT 74609-46-4DP, esters
RL: SPM (Synthetic preparation), PREP (Preparation)
(prepn. of, as insecticides)
RN 74609-46-4 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

ANSWER 54 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) dimethyl-, methyl ester, [1.alpha.,3.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 83376-83-4 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, methyl ester, [1.alpha.,3.beta.(Z)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 133521-60-5 CAPLUS
CN Cyclopropanecarboxylic acid,
3(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,6-dichlorophenyl)methyl ester, [1.alpha.,3.alpha.(E)]-(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 133521-61-6 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,6-dichlorophenyl)methyl ester, [1.alpha.,3.beta.(E)](SCI)
(CA INDEX NAME)

ANSWER 54 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) dimethyl- (9CI) (CA INDEX NAME)

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1991:185016 CAPLUS
MENT NUMBER: 114:185016 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

Process for preparing .alpha.-cyanobenzyl cyclopropanoates
Hodacova, Jana; Tichy, Milos; Kral, Vladimir; INVENTOR (S):

Dvorak, Dalimil; Zavada, Jiri; Stibor, Ivan; Mostecky, Jiri;

Votava, Vladimir; Dolansky, Vladimir; et al. PATENT ASSIGNEE(S): SOURCE:

Czech. Czech., 9 pp. CODEN: CZXXA9 DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC, NUM, COUNT: PATENT INFORMATION: Czech 1

APPLICATION NO. DATE PATENT NO. KIND DATE CS 265009 OTHER SOURCE(5): GI B1 19890912 MARPAT 114:185016 CS 1986-7146 19861003

AB The title compds. [I; R = (un)substituted C1-3 alkenyl; R1, R2 =  $H_1$  halo]

were prepd. by reaction of sulfonate salts II (R3 = H, CH2CH2OH, M+ = alkali metal cation, ammonium: R1, R2 as above) with 1-3 equiv. of an alkali cyanide, 1 equiv. of the appropriate cyclopropanecarboxylic acid

(III), 1 equiv. of (NH4)2CO3 or an alkali metal carbonate, and 1-2 equiv. aulfonyl chloride R4502Cl [R4 = (Me-substituted) Ph], in the presence of a

sulfony entoring resource in ence of a phase transfer catalyst, e.g., quaternary ammonium salt, and a Broensted base at 0-90.degree. in a 2-phase liq. system contg. H2O

a H2O-immiscible solvent. A mixt. of III (R = cis-CC12:CH) 0.95, K2C02 1.38, II (R1 = R2 = R3 = H, M = Na) 1.55, KCN 0.98, PhCH2N+Et3 C1-

0.67.

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

74609-46-4 CAPLUS Cyclopropanecarboxylic acid, -chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl- (9CI) (CA INDEX NAME)

133226-92-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-phenoxyethenyl)-) (CA INDEX NAME) CN (9CI)

52315-07-8P 66824-41-7P 66841-26-7P 68085-85-8P 133226-90-1P 133226-91-2P RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. of, method for) 52315-07-8 CAPLUS ΙT

52315-07-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 66824-41-7 CAPLUS
CN Cyclopropanecarboxylic acid,
2,2-dimethyl-3-(1,2,2,2-tetrachloroethyl)-,
cyano(3-phenoxyphenyl)methyl ester (SCI) (CA INDEX NAME)

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) and 4-CH3C6H4SO2C1 0.95 g in 5 mL H2O and 20 mL PhMe was stirred intensively for 70 h at the ambient temp. to give 1.88 g title compd.

R = cis-CC12:CH, R1 = R2 = H). Some analogous esters are

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME) 59042-49-8 CAPLUS

Relative stereochemistry.

RN 66841-66-5 CAPLUS
CN Cyclopropanecarboxylic acid,
2,2-dimethyl-3-(1,2,2,2-tetrachloroethyl)(9CI) (CA INDEX NAME)

68198-91-4 CAPLUS Cyclopropanearboxylic acid, 3-(1,2-dibromo-2,2-dichloroethyl)-2,2-dimethyl- (9C1) (CA INDEX NAME)

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

66841-26-7 CAPLUS Cyclopropanecarboxylic acid, 3-{1,2-dibromo-2,2-dichloroethyl}-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{Me} \\ & & \\ B_{r} - CC1_{2} - CH & \text{OPh} \\ & & \\ B_{r} & & \\ \end{array}$$

68085-85-8 CAPLUS
Cyclopropanecarboxylic acid,
-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

133226-90-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-phenoxyethenyl)-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

133226-91-2 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethyl}-2,2-dimethyl-, [3-chloro-5-(3-chlorophenoxy)phenyl]cyanomethyl ester (9CI) (CA INDEX NAME)

ANSWER 55 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:122126 CAPLUS DOCUMENT NUMBER: 114:122126

TITLE: Bis(oxazolines) as chiral ligands in metal-catalyzed

asymmetric reactions. Catalytic, asymmetric cyclopropanation of olefins Evans, David A.; Woerpel, Keith A.; Hinman, Mira

AUTHOR(S): M.;

Faul, Margaret M. Dep. Chem., Harvard Univ., Cambridge, MA, 02138, CORPORATE SOURCE:

J. Am. Chem. Soc. (1991), 113(2), 726-8 CODEN: JACSAT; ISSN: 0002-7863 SOURCE:

DOCUMENT TYPE:

Journal English CASREACT 114:122126 LANGUAGE: OTHER SOURCE(S):

Chiral bis(oxazoline) derivs., e.g. I (R = CHMe2, CMe3; R1 = H, Me)

used upon complexation with cuprous triflate for the stereoselective cyclopropanation of styrene. Thus, the cyclopropanation of styrene

N1CH2CO2Et in the presence of I (R = CMe3; R1 = Me) and cuprous triflate gave cyclopropanecarboxlates II (R3 = H, R4 = Ph) and II (R3 = Ph, R4

in 77% overall yield, in a 73:27 isomer ratio and in 99 and 97% enantiomeric excess, resp. Other monosubstituted or 1,1-disubstituted olefins behaved similarly, giving cyclopropyl esters, essentially with

olering behaved Similarly, giving cyclopropyl esters, essentially with abs. stereocntrol.

131899-82-6P 131899-85-9P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation)
(prepn. and redn. of)

131899-82-6 CAPIUS
Cyclopropanecarboxylic acid, 2-phenyl-, 2,6-bis(1,1-dimethylethyl)-4-methylphenyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

131899-85-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,6-bis(1,1-dimethylethyl)-4-methylphenyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

34702-96-0P 34703-00-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and transamination or epimerization of) 34702-96-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1S,2S)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

34703-00-9 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1S,2R)- (9CI) CN (CA

Absolute stereochemistry. Rotation (+).

L7 ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

23020-15-7P 23020-18-0P 34702-97-1P 34716-60-4P 67428-04-0P 89007-61-4P 131833-95-9P 131899-81-5P 131899-83-7P 131899-84-8P RL: SPN (Synthetic preparation); PREP (Preparation)

(Preparation) (PREP (Preparation) (Preparation) (Preparation)

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Absolute stereochemistry. Rotation (+).

RN 23020-18-0 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, (1s,2m)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

34702-97-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (-).

34716-60-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)- (9CI)

INDEX NAME)

L7 ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry. Rotation (-).

RN 67428-04-0 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-diphenyl-, ethyl ester, (1S)- (9CI) (CA

Absolute stereochemistry. Rotation (+).

89007-61-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-, ethyl ester, (S)- (9CI) INDEX NAME)

Absolute stereochemistry,

131833-95-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,6-dimethylphenyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 131899-81-5 CAPLUS

L7 ANSWER 57 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:553041 CAPLUS
1050:UMENT NUMBER: 113:153041
111LE: Preparation of (2R,3S,4S)-.alpha.
(carboxycyclopropyl)glycine as a

N-methyl-D-aspartic

acid (NMDA)-type glutamate receptor agonist Ohfune, Yasufumi, Shimamoto, Keiko; Shinozaki, Haruhiko; Ishida, Michiko Suntory, Ltd., Japan Eur. Pat. Appl., 6 pp. CODEN: EPXXDW Patent INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

XIND DATE APPLICATION NO.

EP 363994 A3 19910327
EP 363994 A3 19910327
EP 363994 B1 19930922
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE
JP 02108654 A2 19900420 JP 1988-261155 1
JP 2757960 B2 19980525
US 5068412 A1 1991126 US 1989-42270
AT 94867 E 19931015 AT 1900
ES 2059669 T3 19941116

PRIORITY APPLN. INFO.: APPLICATION NO. DATE 19891017 19881017 19891017 19891017 19891017 19881017

The title compd. (I), a conformationally restricted glutamatergic

L7 ANSWER 56 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester,
(1R,2R)-

(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

131899-83-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, CN Cyclopropance (1R, 2S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

131899-84-8 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,6-dimethylphenyl ester, (1R-cis) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 57 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) useful as a tool to investigate various neuronal functions related to

excitatory amino acid receptors, was prepd. by a procedure comprising

(1)

cycloaddn. reaction of (2R)-2-aminobutenol deriv. (II) Boc = tert-butyoxycarbonyl; TBDMS = tert-butyldimethylsiyl) with Bt diazoacetate in Et20 in the presence of Pd(Oko)2; (2) removal of TBDMS groups from the resulting mixt. of 4 stereoisomers of (2R)-alpha-(carboxycyclopropyl) glycinol derivs. (III) by an acid catalyst, e.g., D,L-camphorsulfonic acid in Et0H; (3) chromatog, sepn. of carboxycyclopropyl alcs. (IV and V), and oxidn. of IV by Jones reagent followed by deprotection. In an electrophysiol. expt. with the isolated newborn rat spinal cord I had a min. effective concn. of 3 .times.

mol./L vs. 1 .times. 10-4 for L-glutamic acid.
IT 129569-17-1P 129569-18-2P RL: SPN (Synthetic preparation); FORM (Formation, nonpreparative);

PREP

(Preparation)
(formation of, in prepn. of glutamatergic agonist)
RN 129569-17-1 CAPLUS
CN Cyclopropaneararboxylic acid,
2-[1-[(1,1-dimethylethoxy) carbonyl] amino]-2hydroxyethyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 129569-18-2 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[1,1-dimethylethoxylcarbonyl]amino]-2hydroxyethyl]-, ethyl ester, [1s-[1.alpha.,2.alpha.(5\*)]]- (9CI)
INDEX NAME)

(CA

Absolute stereochemistry.

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 57 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
(prepn. and Jones oxidn. of, in prepn. of glutamatergic agonist)
RN 129569-16-0 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxy)carbonyl]amino]-2hydroxyethyl]-, ethyl ester, [15-[1.alpha.,2.beta.(S\*)]]- (9CI) (CA
INDEX
NAME)

Absolute stereochemistry.

129569-19-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conversion to acid, in prepn. of glutamatergic

(prepn. and conversion to actu, in propn. - )
agonist)
NN 129569-19-3 CAPLUS
CN Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, monoammonium salt,
[15-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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IT 129569-15-9P 129569-91-1P
RI: RCT (Reactant); SPM (Synthetic preparation); PREP (Preparation) (prepn. and deprotection of, in prepn. of glutamatergic agonist)
RN 129569-15-9 CAPLUS
CN Cyclopropanecarboxylic acid,
2-[1-[[(1,1-dimethylethoxyl)carbonyl]amino]-2[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]-, ethyl ester (9CI)
(CA

INDEX NAME)

L7 ANSWER 58 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:216372 CAPLUS
DOCUMENT NUMBER: 112:216372
TITLE: Phase-transfer catalyzed synthesis of amides and esters of carboxylic acids
AUTHOR(5): Jazzay, Zuuzsa M.; Petnehazy, Imre; Toke, Laszlo CORPORATE SOURCE: Synthesis (1989), (10), 745-7
CODEN: SYNTBF, ISSN: 0039-7881
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 112:216372
AB A convenient one-pot procedure is reported for the prepn. of carboxamides
and esters from RCOZH (e.s., R = Ph, 2-HOC6H4) and amines.

carboxamides
and esters from RCO2H (e.s., R = Ph, 2-HOC6H4) and amines,
hydrazines, or
alcs. resp. RCO2H is activated by RISO2Cl (R1 = Me, 4-MeC6H4) under
solid-liq. phase-transfer conditions using K2CO3 as base and Et3PhCH2NC1

ΙT

PhCHENC1
as catalyst.
59042-50-1
RL: PROC (Process)
(conversion of, to amides and esters)
59042-50-1 CAPIUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT

827-90-7
RL: RCT (Reactant)
(esterification of)
827-90-7 CAPLUS
77646-99-2P 107297-56-3P
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) (prepn

Relative stereochemistry.

ANSWER 57 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

129569-91-1 CAPLUS
Cyclopropaneacetic acid, 2-carboxy-.alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]-, [15-[1.alpha.(5\*),2.beta.]]- (9CI)

INDEX NAME)

Absolute stereochemistry.

125412-11-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as glutamatergic agonist)
125412-11-5 CAPLUS
Cyclopropaneacetic acid, .alpha.-amino-2-carboxy-, (.alpha.R,1S,2S)-

(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L7 ANSWER 58 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

107297-56-3 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-phenylmethyl ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 59 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1990:179518 CAPLUS DOCUMENT NUMBER: 112:179518
TITLE: Prenaration

Preparation of trans-chrysanthemumic acid derivatives

by isomerization Suzukamo, Gohfu; Fukao, Masami; Sakito, Yoji Sumitomo Chemical Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JXXXAF INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE: Japanese 1

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 01287053 JP 07017567 OTHER SOURCE(S): A2 19891117 B4 19950301 MARPAT 112:179518 JP 1988-115371 19880512

AB The title derivs. trans-I (X = OH, halo, C1-20 alkoxy, aralkyloxy, 2,2-dimethyl-3-isobutenylcyclopropanecarbonyloxy), useful as intermediates
for pyrethroid insecticides, are prepd. by treatment of cis-I, or

mixts. with trans-I, with SH compds. in the presence of peroxides or

mixts. with trans-I, with SH compds. in the presence of peroxides of azo compds. A toluene soln. of PhSH was added dropwise to a mixt. of cis-I (X = OH) (1.0 g), NCCMe2N:NCMe2CN, and toluene at 80.degree. and the reaction mixt. was further stirred at 80.degree. for 1 h to give 0.92 g I (cis/trans = 8.5/91.5).

IT 15259-78-6, cis-Chrysanthemumic acid RL: RCT (Reactant) (isomerization of, catalysts for)

RL: RCT (Reactant) (isomerization of, catalysts for)

R1 5259-78-6 CAPLUS

IT 827-90-7P, trans-Chrysanthemumic acid 1802-02-4P, Ethyl trans-chrysanthemate 1429-77-82-6P 2414-52-4P, Methyl trans-chrysanthemate 96393-69-0P, Butyl trans-chrysanthemate RL: SPN (Synthethic preparation); PREP (Preparation) (prepn. of, by isomerization)

RN 827-90-7 CAPLUS

RN 1802-02-4 CAPLUS

CN Cyclopropaneoarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl

CN ethyl

ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 59 OF 139 CAPLUS COPYRIGHT 2002 ACS

L7 ANSWER 59 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

14297-82-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, anhydride (9CI) (CA INDEX NAME)

24141-52-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

96393-69-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, CN Cyclopropaness..., butyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:614709 CAPLUS
DOCUMENT NUMBER: 111:214709
TITLE: Author(s): Cottens, Sylvain, Schlosser, Manfred
CORPORATE SOURCE: Inst. Chim. Org., Univ. Lausanne, Lausanne, AUTHOR(S): CORPORATE SOURCE: CH-1005,

Switz. Tetrahedron (1988), 44(23), 7127-44 CODEN: TETRAB; ISSN: 0040-4020 Journal English CASRRACT 111:214709 SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB A sulfone mediated approach presumably did produce Me .alpha.fluorochrysanthemate I but, if formed, the latter immediately underwent

underwent dehydrofluorination under the strongly basic reaction conditions. The cis- and trans-isomers of Me .beta.- and .gamma.-fluorochysanthemates

and III were concomitantly obtained by treating
3-fluoro-2,5-dimethyl-2,4hexadiene with N2CH2CO2Me in the presence of catalytic amts. of Rh (OAc) 2.

Ac)2.

After enzymic and chromatog, sepn, the four individual components were converted to the m-phenoxybenzyl esters.

123502-20-59 123502-21-69 123502-22-7P

RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation) (prepn. and esterification of)

123502-20-5 CAPLUS

RN 123502-20-5 CAPLUS CN Cyclopropanecarboxylic acid, 2-fluoro-3,3-dimethyl-2-(2-methyl-1-propenyl)-, cis- (9CI) (CA INDEX NAME)

RN 123502-21-6 CAPLUS CN Cyclopropanecarboxylic acid, 3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl-, cis- (9Cl) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-22-7 CAPLUS CN Cyclopropanecarboxylic acid, 3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl-, trans-(9C1) (CA INDEX NAME)

Relative stereochemistry.

IT 123502-15-8F 123502-16-9F 123502-17-0F
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation)
(prepn. and hydrolysis of)
RN 123502-15-8 CAPLUS
CN Cyclopropasecarboxylic acid,
3-{1-fluoro-2-methyl-1-propenyl}-2,2-dimethyl, 1,1-dimethylethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 123502-04-5 CAPLUS
CN Cyclopropanecarboxylic acid,
2-fluoro-3,3-dimethyl-2-(2-methyl-1-propenyl), methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-06-7 CAPLUS
CN Cyclopropaneoarboxylic scid,
2-fluoro-3,3-dimethyl-2-(2-methyl-1-propenyl), methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-07-8 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl, methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 123502-16-9 CAPLUS
CN Cyclopropanecarboxylic acid,
2-fluoro-3,3-dimethyl-2-(2-methyl-1-propenyl), 1,1-dimethylethyl ester, cis- {9Cl} (CA INDEX NAME)

Relative stereochemistry.

RN 123502-17-0 CAPLUS CN Cyclopropanecarboxylic acid, 3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl-, 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 123502-03-4F 123502-04-5F 123502-06-7F
123502-07-8F
RI: RCT (Reactant); SFN (Synthetic preparation); PREF (Preparation)
(prepn. and transesterification of)
RN 123502-03-4 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-mathyl-1-propenyl)-2,2-dimethyl, methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

4638-92-0DP, fluoro derivs.

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
4638-92-0 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(IR,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 123502-11-4P 123502-12-5P 123502-13-6P 123539-92-4P

RL: SPM (Synthetic preparation); PREP (Preparation) (prepn. of, as potential pyrethroid)

RN 123502-11-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-fluor-3,3-dimethyl-2-(2-methyl-1-propenyl)-, ethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-12-5 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl, ethyl ester, trans- (9CI) (CA INDEX NAME)

RN 123502-13-6 CAPLUS
CN Cyclopropanecarboxylic acid,
2-(1-fluoro-2-methyl-1-propenyl)-3-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.alpha.,3.alpha.)- (9CI) (CA
INDEX

Relative stereochemistry.

RN 123539-92-4 CAPLUS
CN Cyclopropanecarboxylic acid,
2-(1-fluoro-2-methyl-1-propenyl)-3-methyl-,
1,1-dimethylethyl ester, (1.alpha.,2.beta.,3.beta.)- (9CI) (CA INDEX

Relative stereochemistry.

ΙT 123502-23-8P 123502-24-9P 123502-25-0P 123502-26-1P

123502-26-IP
RI: SPM (Synthetic preparation); PREP (Preparation)
(prepn. of, as potential pyrethroids)
RN 123502-23-8 CAPLUS
CN Cyclopropaneoarboxylic acid,
2-fluoro-3,-d-inethyl-2-(2-methyl-1-propenyl), (3-phenoxyphenyl)methyl ester, trans- (9CI) (CA INDEX NAME)

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS

īΤ 123502-14-7P IT 123502-14-7P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation)
(prepn., ring cleavage, and hydrolysis of)
RN 123502-14-7 CAPLUS
CN Cyclopropaneoarboxylic acid,
2-fluoro-3, 3-dimethyl-2-(2-methyl-1-propenyl), 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 60 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

RN 123502-24-9 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl, (3-phenoxyphenyl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-25-0 CAPLUS
CN Cyclopropanecarboxylic acid,
2-fluoro-3,3-dimethyl-2-(2-methyl-1-propenyl), (3-phenoxyphenyl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 123502-26-1 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(1-fluoro-2-methyl-1-propenyl)-2,2-dimethyl, (3-phenoxyphenyl)methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 61 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1989:573178 CAPLUS DOCUMENT NUMBER: 111:173178
TITLE: Asymmetric had: and Asymmetric hydrocyanation of a range of aromatic

AUTHOR(S):

AUTHOR(S):

AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

DOTHER SOURCE(S):

AB A range of aromatic alebydes

AUTHOR, JESUS AUTHOR, JESUS

HCN in the presence of the Inoue catalyst, (R,R)- or (S,S)-cyclo(phenylalanylhisticyl). Most aryl aldehydes with electron-donating substituents in the m- or p-positions give high enantiomeric excess (e.e.) values (.gtoreq.80%), but aryl aldehydes

strong electron-withdrawing substituents gave moderate e.e. values (.ltoreq.50%). These moderate values are believed to be due to partial

(literation). These manufactures of the product cyanohydrins in the presence of the mildly racemization of the product cyanohydrins in the presence of the mildly basic catalyst. In contrast to the reactions of aryl aldehydes, reactions of alkyl aldehydes and of ketones gave low e.e. values (.ltoreq.30%), an explanation is proposed.
87728-85-7 122045-31-2
REL RCT (Reactant) (esterification of, with hydroxy nitriles, detn. of enantiomeric sets.

excess
by)
RN 87725-85-7 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, [1R-[1.alpha.,3.alpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

122045-31-2 CAPLUS

CN Cyclopropanecarboxylic acid, 3-(2-chlore-3,3-terifluore-1-propenyl)-2,2-dimethyl-, [15-[1.aipha..3.alpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

IΤ

121950-23-OP 121950-24-1P 121950-25-2P
RL: RCT (Reactant) SPN (Synthetic preparation); PREF (Preparation) (prepn. and racemization of)
121950-23-0 CAPLUS

RN 121950-23-0 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano[4-(trifluoromethyl)phenyl]methyl ester,
[1R-[1.alpha.(R\*),3.alpha.(E)]]- (SCI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 121950-24-1 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(2-nitrophenyl)methyl ester, [1R[1.alpha.(R\*),3.alpha.(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 121950-25-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano (4-nitrophenyl)methyl ester, [1R[1.alpha.(R\*),3.alpha.(E)])- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:533660 CAPLUS
DOCUMENT NUMBER: 111:133660
Cyclopropanediamines. 3. Pure diastereomers of 1,2-cyclopropanedicarboxylic acids and

derivatives AUTHOR(S):

Von der Saal, Wolfgang; Reinhardt, Robert; Seidenspinner, Hubert Matthias; Stawitz, Josef;

Quast,

Helmut Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, CORPORATE SOURCE: D-8700,

D-8700,

Fed. Rep. Ger.

SOURCE: Liebigs Ann. Chem. (1989), (8), 703-12
CODEN: LACHDL; ISSN: 0170-2041
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 111:133660
AB Efficient prepns. of pure disastereomers of di-Me 1,2cyclopropanedicarboxylates, dicarboxylic acids, dicarbonyl
dichlorides.

and dihydrazides are reported. Mixts. of diastereomers of di-Me dicarboxylates are obtained from .alpha.,.beta.-unsatd. Me carboxylates are obtained some same same and Me .alpha.-chlorocarboxylates as well as from RCH:CHC02Me (R =

ny and Me2S+C-HCO2Me. The diastereomers are sepd. by fractionating

ns. or crystn. on a 100 g to 1 kg scale (d.e. .gtoreq.99%). 3,3-Dimethyl-cis-1,2-cyclopropanedicarboxylic acid is obtained by ., -vametry1-C19-1,2-cyclopropanedicarboxylic acid is obtained by trans
.fwdarw. cis isomerization with the help of Ac20 and AcONa as catalyst. Derivs. of cis-1,2-dimethyl-1,2-cyclopropanedicarboxylic acid tend to form bicyclic products.

IT 696-74-2P 697-48-3P 699-49-0P 934-67-8P 1406-7P 16601-23-3P 19952-64-0P 119908-64-4P 119908-65-5P 119908-66-6P 119945-23-2P RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and spectra of)
RN 696-74-2 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

697-48-3 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1-methyl-, cis- (8CI, 9CI) (CA

NAME)

ANSWER 61 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT 121950-26-3P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
RN 121950-26-3 CAPLUS
CN Benzeneacetic acid,
.alpha.-[[[3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropyl]carbonyl]oxyl-4-methoxy-, methyl ester,
[1R-[1.alpha.(R\*),3.alpha.(E)]]- (SCI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

699-49-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,2-dimethyl-, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

936-87-8 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

1740-84-7 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, trans- (8CI, 9CI)

INDEX NAME)

Relative stereochemistry.

16601-23-3 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, dimethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

RN 19952-64-8 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, (1.alpha,2.alpha,3.beta.)-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 19952-66-0 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, (1.alpha.,2.beta.,3.alpha.)-(9C1) (CA INDEX NAME)

Relative stereochemistry.

119908-64-4 CAPLUS
1,2-Cyclopropanedicarboxylic acid, dipotassium salt, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

●2 K

ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 119908-77-9 CAPLUS Cyclopropanecarboxylic acid, 2-(chlorocarbonyl)-1,2-dimethyl-, cis-(CA INDEX NAME)

Relative stereochemistry.

702-91-0P 702-92-1P 826-34-6P 826-35-7P 6914-70-1P 6914-83-6P 14661-79-1P 19952-65-9P 20098-66-2P 28363-79-39 28363-79-39
RL: SFN (Synthetic preparation), PREP (Preparation)
(prepn., spectra, and reactions of)
702-91-0 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1-methyl-, dimethyl ester, cis-

9CI) (CA INDEX NAME)

Relative stereochemistry.

702-92-1 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, dimethyl ester, trans-(8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 826-34-6 CAPLUS CN 1.2-Cyclopropanedicarboxylic acid, dimethyl ester, (1R,2S)-relfoct) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) RN 119908-65-5 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, dipotassium salt, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

●2 K

119908-66-6 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,2-dimethyl-, dipotassium salt, (9CI) (CA INDEX NAME)

Relative stereochemistry.

●2 K

119945-23-2 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, dipotassium salt,
(1.alpha.,2.beta.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

●2 K

119908-77-9P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

826-35-7 CAPLUS 1,2-Cyclopropanedicarboxylic acid, dimethyl ester, (1R,2R)-rel- (9CI) INDEX NAME)

Relative stereochemistry

6914-70-1 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,2-dimethyl-, dimethyl ester, cis-(8C1, 9C1) (CA INDEX NAME)

Relative stereochemistry.

6914-83-6 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,2-dimethyl-, dimethyl ester, (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

14661-79-1 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3-methyl-, dimethyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

19952-65-9 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, dimethyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

20098-66-2 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 3-phenyl-, dimethyl ester, (1.alpha.,2.beta.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 28363-79-3 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, 3-methyl-, dimethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:492323 CAPLUS
DOCUMENT NUMBER: 111:92323
TITLE: carboxylates Preparation of (ortho-substituted)benzyl INVENTOR(S):

as fungicides
Schuetz, Franz; Sauter, Hubert; Schirmer, Ulrich;
Wolf, Bernd; Ammermann, Eberhard; Pommer, Ernst
Heinrich
BASF A.-G., Fed. Rep. Ger.
Eur. Pat. Appl., 31 pp.
CODEN: EPYXDW
Patent
German
1

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 310954	A1	19890412	EP 1988-116173	19880930
EP 310954		19901122	DI 1500 1101/5	15000550
			GB, GR, IT, LI, NL, SE	
DE 3733870	A1	19890427		
IL 87825				
	A1	19920329		19880920
CA 1315277	A1	19930330	CA 1988-578569	19880927
AT 58522	E	19901215	AT 1988-116173	19880930
DD 274557	A5	19891227	DD 1988-320449	19881004
JP 01128959	A2	19890522		
AU 8823464	A1	19890413		19881006
AU 611485	B2	19910613		
HU 49562	A2	19891030	HU 1988-5186	19881006
HU 200587	В	19900728		
ZA 8807493	A	19900627	ZA 1988-7493	19881006
CZ 283689	В6	19980617	CZ 1988-6663	19881006
US 4952720	A	19900828	US 1988-254696	19881007
PRIORITY APPLN.	INFO.:		DE 1987-3733870	19871007
			EP 1988-116173	
OTHER SOURCE(S):	CA	SREACT 111	:92323; MARPAT 111:923	

$$R^3X_nCO_2CH_2$$
 BrCH<sub>2</sub> BrCH<sub>2</sub>  $CR^2 = CHR^1$  I  $CR^2 = CHR^1$  II

AB The title compds. I [R1 = alkoxy, alkylthio, halo, NH2, alkylamino; R2 = alkoxycarbonyl, CN, CONH2, R3 = H, halo, CN, (un)substituted aryl or aryloxy, etc., X = alkylene, haloalkylene, hydroxyalkylene: n = 0, aryioxy, etc.; X = alkylene, halcalkylene, hydroxyalkylene: n = 0, 1 are fungicides, prepd. by the reaction of the corresponding benzyl bromide II with a alkali metal, alk. earth metal or ammonium salt of RJXnCO2H in a

L7 ANSWER 62 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) solvent, optionally in the presence of a catalyst. BrOH was converted into the K salt by treatment with KOH in EtOH, followed by reaction with II (RI = OMe, RZ = CO2Me) in DMF, to give Me.alpha.-(2-benzoyloxymethylphenyl)-.beta.-methoxyacrylate. (E)-I [R1

OMe, R2 = CO2Me, R3 = H, Xn = (CH2)4CHMeCH2] (III) (0.025%) controlled Puccinia recondita on wheat, in pot expts. A formulation comprised

20, Ca dodecylbenzenesulfonate 2, fatty alc. polyglycol ether 8, phenolulfonic acid-urea-formaldehyde condensate 2, and paraffinic mineral cil 684 by wt.

IT 122143-19-59

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction of, with acrylic acid deriv.)

RN 122143-19-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-(2-chlorophenyl)- (9CI) (CA INDEX NAME)

IT 122143-89-9P
RL: AGR (Agricultural use); BAC (Biological activity or effector,
except
adverse); SFN (Synthetic preparation); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(prepn. of, as agrochem. fungicide)
RN 122143-89-9 CAPLUS
CN Cyclopropanecarboxylic acid, 1-methyl-, [2-(1-cyano-2methoxyethenyl)phenyl]methyl ester, (Z) - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

IT 122143-17-3P 122143-29-7P 122143-60-6P 122143-61-7P 122143-62-8P 122143-63-9P 122143-63-9P 122143-63-9P 122143-64-0P 122143-78-6P 122143-79-7P 122143-80-0P 122143-81-1P 122143-82-2P 122143-83-3P 122143-84-4P 122143-85-5P 122143-87-7P 122163-51-6P

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 122168-52-99 KB: AGR (Agricultural use); BAC (Biological activity or effector,

RI: AGK (Agricultura user, and (alcoholus)

except
except
(Preparation), USES (Uses)
(prepn. of, as fungicide)
RN 122143-17-3 CAPLUS
CN Benzeneacetic acid,
2-[[[[1-(2-chlorophenyl)cyclopropyl]carbonyl]oxy]methy
l]-.alpha.-(methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

122143-29-7 CAPLUS
Benzeneacetic acid, 2-{{(cyclopropylcarbonyl)oxy}methyl]-.alpha.(methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

122143-60-6 CAPLUS Benzeneacetic acid, 2-[[[[2,2-dimethyl-3-(2-methyl-1-

propenyl)cyclopropyl]carbonyl]oxy]methyl]-.alpha.-(methoxymethylene)-,
 methyl ester (9CI) (CA INDEX NAME)

122143-61-7 CAPLUS
Benzeneacetic acid, 2-{[[{3-(2,2-dichloroethenyl)-2,2-

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS

122143-77-5 CAPLUS
Benzeneacetic acid, .alpha.-(methoxymethylene)-2-[[{(1-methylcyclopropyl)carbonyl]oxy]methyl]-, methyl ester, (E)- (9CI)

(CA

INDEX NAME)

Double bond geometry as shown.

122143-78-6 CAPLUS
Benzeneacetic acid, .alpha.-(methoxymethylene)-2-[[[{2-methylcyclopropyl)carbonyl]cxy]methyl}-, methyl ester [9CI) (CA

RN 122143-79-7 CAPLUS
CN Benzeneacetic acid,
2-[[(2,2-dichlorocycolopropyl)carbonyl]oxy]methyl].alpha.-(methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX

NAME)

Double bond geometry as shown.

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) dimethylcyclopropyl]carbonyl)oxy]methyl]-.alpha.-(methoxymethylene)-, methyl est (9Cl) (CA INDEX NAME)

122143-62-8 CAPLUS
Benzeneacetic acid, 2-[[[[3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropyl]carbonyl]oxy]methyl]-.alpha.-(methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

122143-63-9 CAPLUS
Benzeneacetic acid, 2-[[[[3-(2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethylcyclopropyl]carbonyl]oxy]methyl]-.alpha.-(methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH-OMe} \\ \text{He} \\ \text{Me MeO-C-C} \\ \text{F}_3\text{C-C} = \text{CH} \\ \end{array}$$

RN 122143-64-0 CAPLUS
CN Benzeneacetic acid,
2-[[([2,2-dichloro-3,3-dimethylcyclopropyl)carbonyl]ox
y]methyl]-alpha.-(methoxymethylene)-, methyl ester, (E)- {9CI} (CA

NAME)

Double bond geometry as shown.

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 122143-80-0 CAPLUS

Senzeneacetic acid,
2-[[((2,2-dichloro-1-methylcyclopropyl)carbonyl]oxy]me
thyl]-alpha.-(methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

122143-81-1 CAPLUS
Benzeneacetic acid, .alpha.-(methoxymethylene)-2-[[[(2-phenylcyclopropyl)carbonyl]oxy]methyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 122143-82-2 CAPLUS
CN Benzeneacetic acid,
2-[[[[1-(2-chlorophenyl)cyclopropyl]carbonyl]oxy]methy
1]-.alpha.-(methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 122143-83-3 CAPLUS
CN Benzeneacetic acid,
2-[[[[1-(3-chlorophenyl)cyclopropyl]carbonyl]oxy]methy
1-alpha. (methoxymethylene)-, methyl ester, (E)- (9CI) (CA INDEX

Double bond geometry as shown.

122143-84-4 CAPLUS
Benzeneacetic acid, .alpha.-(methoxymethylene)-2-[[[[1-(4-methoxyphenyl)cyclopropyl]carbonyl]oxy]methyl}-, methyl ester, (E)-

(CA INDEX NAME)

Double bond geometry as shown.

ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

122168-52-9 CAPLUS
Cyclopropanecarboxylic acid, 1-(4-chlorophenyl)-, [2-[2-methoxy-1(methoxycarbonyl)ethenyl]phenyl]methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L7 ANSWER 63 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

122143-85-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
[2-(1-cyano-2-methoxyethenyl)phenyl]methyl ester (9Cl) (CA INDEX

122143-87-7 CAPLUS Cyclopropanecarboxylic acid, 1-methyl-, {2-(1-cyano-2-methoxyethenyl)phenyl]methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

122168-51-8 CAPLUS Cyclopropanecarboxylic acid, 1-phenyl-, [2-[2-methoxy-1-(methoxycarbonyl)ethenyl]phenyl]methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L7 ANSWER 64 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1989:231927 CAPLUS DOCUMENT NUMBER: 110:231927 TITLE: Preparation of trans-chryderivatives Preparation of trans-chrysanthemumic acid

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

as materials for pyrethroid insecticides Suzukamo, Gohfur Sakito, Yojir Fukao, Masami Sumitomo Chemical Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF Fatent

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Japanese 1

PATENT NO. KIND DATE APPLICATION NO. DATE JP 63275542 JP 06017334 OTHER SOURCE(S): GI 2 19881114 4 19940309 MARPAT 110:231927 JP 1987-109514 19870430

trans-I (R = H, C1-20 alkyl, cycloalkyl, aralkyl) are prepd. by isomerization of cis-I or its mixt. with trans-I with .gtoreq.1 Br compds.

selected from acyl bromides, bromosilanes, S-bromides, and N-bromides

the presence of peroxides or azo compds. A soln. of 5.0 g cis-I (R =H)

and AIBN in toluene was treated dropwise with a soln. of AcBr in

and AIEN in toluene was treated dropwise with a sum. of New ...
toluene
over 20 min at 80.degree. to give 4.6 g I (R = H) contg. 90.1%
trans-isomer.
II 15259-78-6 26771-06-2
RL: RCT (Reactant)
(isomerization of)
RN 15259-78-6 CAPLUS
RN 26771-06-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(15,3R)- (9CI) (CA INDEX NAME)

ANSWER 64 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

827-90-7P, trans-Chrysanthemumic acid 1802-02-4P
2259-14-5P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of, as material for pyrethroid insecticides)
827-90-7 CAPLUS
1802-02-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ΙT

RN RN CN ethyl

ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

2259-14-5 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-{2-methyl-1-propenyl}-, {1S,3S}- {9CI} (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 65 OF 139 CAPLUS COPYRIGHT 2002 ACS

L7 ANSWER 65 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1989:213139 CAPLUS DOCUMENT NUMBER: 110:213139 TITLE: Preparation of trans-chry derivatives as

materials for insecticides
Suzukamo, Gohfus Sakito, Yoji, Fukao, Masami
Sumitomo Chemical Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JXXXAF
Patent
Japanese
1 INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A2 19881104 B4 19950301 MARPAT 110:213139 JP 63267743 JP 07017564 OTHER SOURCE(S): JP 1987-105788 19870427

AB The title derive, trans-I (R = H, Cl-20 alkyl, cycloalkyl, aralkyl) are

prepd. by isomerization of cis-I or its mixt, with trans-I with P bromides
in the presence or absence of azo compds. A soln. of 5.0 g cis-I (R

In the presence or assence of azo compos. A soin or 5.0 g dis-1 (s and AlEN in toluene was treated dropwise with PBr3 at 80.degree., then the mixt. was stirred for 30 min to give 4.8 g I (R = H) contg. 89.9% trans-isomer.

IT 15259-78-6 RE: RCT (Reactant) (isomerization of, phosphorus bromides in)

RN 15259-78-6 CAPLUS

IT 827-90-79, trans-Chrysanthemumic acid 1602-02-4P

RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. of, as material for pyrethroid insecticides)

RN 827-90-7 CAPLUS

RN 1802-02-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl

ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 66 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:213138 CAPLUS
DOCUMENT NUMBER: 110:213138
TITLE: 6erivatives as Preparation of trans-chrysanthemic acid

materials for pyrethroid insecticides Suzukamo, Gohfur Sakito, Yojir Fukao, Masami Sumitomo Chemical Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 4 pp. CODEN: JKOKAF Patent Japanese INVENTOR(s):
PATENT ASSIGNEE(s):
SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE

JP 63267742 JP 06017333 OTHER SOURCE(S): GI --------2 19881104 4 19940309 MARPAT 110:213138 A2 B4

AB The title derivs. trans-I (R = H, C1-20 alkyl, cycloalkyl, aralkyl) are

JP 1987-100579 19870422

prepd. by isomerization of cis-I or its mixt. with trans-I with Br in the

presence of peroxides or azo compds. A soln. of 2.0 g cis-I (R = H) and

Bz202 in toluene was treated dropwise with a soln. of Br in CCl4 over 20

min at 80, degree,, then the mixt, was stirred for 20 min to give 1.87 g I

ΙT

(R = H) contg. 94.1% trans-isomer.
15259-78-6
RL: RCT (Reactant)
(isomerization of)
15259-78-6 CAPLUS
827-90-7P, trans-Chrysanthemumic acid 1802-02-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as material for pyrethroid insecticides)
827-90-7 CAPLUS
1802-02-4 CAPLUS
CYCLopropagezarboxylic acid. 2.2-dimethyl-1-(2-methyl-1

Cyclopropanecarboxylic acid, 2,2-dimethy1-3-(2-methy1-1-propenyl)-,

ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

ANSWER 66 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 67 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) with PBr3 with stirring at 20.degree. to give racemic I (R=H), which was converted to an isomeric mixt. of (+)-cis- 2.5, (-)-cis-(+)-trans- 47.0, and (-)-trans-I (R = 2-octyl) 48.0%.

827-90-7P, trans-Chrysanthemic acid 1802-02-4P, Ethyl
trans-Chrysanthemate 4638-82-0P 26771-11-9P
41641-25-2P 41641-26-3P 120522-99-8P
120523-00-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as insecticide intermediate)
827-90-7 CAPLUS
1802-02-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

4638-92-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

26771-11-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-25-2 CAPLUS RN 41641-25-2 CAPLUS CN cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

ANSWER 67 OF 139 CAPLUS COPYRIGHT 2002 ACS
ESSION NUMBER: 1989:213127 CAPLUS
110:213127
LE: Method for racemization of optically active chrysanthemic acid or its ester
ENTOR(S): Suzukamo, Gohfu; Sakito, Yoji; Fukao, Masami; iva. INVENTOR(S):

Hagiya,

PATENT ASSIGNEE(S): Koji Sumitomo Chemical Co., Ltd., Japan Eur. Pat. Appl., 12 pp. CODEN: EPXXDW SOURCE:

DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. CO PATENT INFORMATION: COUNT:

PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
EP 261824	A1	19880330		EP 1987-307802	19870903
EP 261824	B1	19900509			
R: BE, CH,	DE, FR	, GB, IT,	LI, N	L	
JP 63196541	A2	19880815		JP 1987-28581	19870210
JP 06088932	B4	19941109			
JP 63196542	A2	19880815		JP 1987-28582	19870210
JP 06047567	B4	19940622			
JP 01006234	A2	19890110		JP 1987-164802	19870630
JP 07017565	B4	19950301			
HU 44994	A2	19880530		HU 1987-3952	19870903
HU 202171	В	19910228			
US 4788323	A	19881129		US 1987-93234	19870904
PRIORITY APPLN. INFO.			JP	1986-208768	19860904
			JP	1987-28581	19870210
				1987-28582	19870210
				1987-80791	19870331

OTHER SOURCE(S): MARPAT 110:213127

The racemization of optically active chrysanthemic acid or its ester AB I (R

= H, C1-20 alkyl, cycloalkyl, or aralkyl), is effected by contacting I with HBr or a P bromide. This method may also be effected in the

presence of a peroxide or azo compd. The method of the present invention can

of a percylde or also compd. The method of the present invention can also be used for the conversion of racemic cis isomer or racemic mixt. of cis-

and trans-chyrsanthemic acid into the corresponding racemic trans-rich isomer. A mixt. of (+)-cis- 1.8, (-)-cis- 18.3, (+)-trans- 11.1, and (-)-trans-I (R = H) 68.84, PhMe, and Me3COOH under N was treated dropwise

ANSWER 67 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R,3R) - (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

41641-26-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry

120522-99-8 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-{2-methyl-1-propenyl}-, 1-methylheptyl ester, [1R-[1.alpha.(R\*),3.alpha.]]- (9CI) (CA INDEX

Absolute stereochemistry.

120523-00-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(R\*),3.beta.]]- (9CI) (CA INDEX NAME)

120523-01-5F 120523-02-6F
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for insecticides)
120523-01-5 CAPIUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1S-(1.alpha.(S\*),3.alpha.]]- (9CI) (CA INDEX) NAME)

Absolute stereochemistry.

120523-02-6 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1S-[1.alpha.(S\*),3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

2259-14-5, (-)-trans-Chrysanthemic acid 15259-78-6, cis-Chrysanthemic acid 26771-06-2 RL: RCT (Reactant)

(racemization of) 2259-14-5 CAPLUS

Absolute stereochemistry.

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,35)- (9CI) (CA INDEX NAME)

ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

ANSWER 68 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1989:213094 CAPLUS
MENT NUMBER: 110:213094
Convenient synthesis of chiral trans-2phenylcyclopropanecarboxylic acid
OR(S): Cho, Nam Sook; Shin, Dae Hyun; Lee, Chong Chul;

AUTHOR(S): Ra, Do

Young Coll. Nat. Sci., Chungnam Natl. Univ., Chungnam, 302-764, S. Korea Bull. Korean Chem. Soc. (1988), 9(4), 195-8 CODEM: BKCSDE: 15SN: 0253-2964 CORPORATE SOURCE:

SOURCE:

CODEN: BKCSDE; ISSN: 0253-2964

DOUMMENT TYPE: Journal
LANGUAGE: English
AB (-)-(1R,2R) and (+)-(1S,2S)-menthyl
trans-2-phenylcyclopropanecarboxylates
 have been synthesized with the aid of chiral Cu(II) complex
 catalyst by the addn. reaction of 1-menthyl diazoacetate to
 styrene. The yield was 75%, with the purity of trans isomer over
95% and

and
the optical purity of 95%.
10488-03-6F 23020-15-7P
RL: RCT (Reactant), PREP (Preparation)
(chiral synthesis of)
10488-03-5 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1R,2R)- (9CI) RN CN (CA

INDEX NAME)

Absolute stereochemistry.

23020-15-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1S,2S)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

105367-36-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and ester hydrolysis of)
105367-36-0 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (1R, 25, 5R)-5-methyl-2-(1-methylethyl) cyclohexyl ester, (1S, 2S)- (9C1) (CA INDEX NAME)

ANSWER 67 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

15259-78-6 CAPLUS 26771-06-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1S,3R)- (9CI) (CA INDEX NAME)

L7 ANSWER 68 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

ΙT

16205-72-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
16205-72-4 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (1S,2S)- (9CI)

(CA INDEX NAME)

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1989:172716 CAPLUS
NEMT NUMBER: 110:172716
E: Semicorrin metal complexes as enantioselective
catalysts. Fart 2. Enantioselective
cyclopropane formation from olefins with diazo
compounds catalyzed by chiral

(semicorrinato) copper

complexes
Fritschi, Hugo; Leutenegger, Urs; Pfaltz, Andreas
Lab. Org. Chem., Eidg. Tech. Hochsch., Zurich,
CH-8092, Switz.
Helv. Chim. Acta (1988), 71(6), 1553-65
CODEN: HCACAV; ISSN: 0018-019X AUTHOR(S): CORPORATE SOURCE:

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S): AB Copper comp

MENT TYPE: Journal UNGE: English English R SOURCE(S): English CASPERCT 110:172716

Copper complexes of chiral, C2-sym. semicorrin ligands are efficient catalysts for the cyclopropane formation from olefins with diazo compds. In the presence of 1 mol-% of catalyst, alkyl diazoactates reacted smoothly with terminal olefins such as styrene, butadiene, and 1-heptene to give the corresponding optically active cyclopropanecarboxylic acid derivs. With one of the catalysts, enanticselectivities up to 97% ee were obtained. Usually, the tions

control electivities up to 97% ee were obtained. Usually, the reactions were scried out using his semicorrinato) copper(II) complexes as precatalysts. In order to produce active catalyst, these complexes had to be activated first by heating in the presence of diazoacetate or by treatment with phenylhydrazine. Expts. with (semicorrinato) copper(I) complexes, prepd. in situ from copper(I) tert-butoxide suggest that the actual catalyst is a [mono (semicorrinato)] copper(I).

II 102251-55-69 105367-48-89 105367-41-79 12006-37-29 120163-42-99 (Synthetic preparation); PREP (Preparation) (prepn. and acid hydrolysis of)

RN 105251-55-6 CAPLUS

CN Cyclopropanearboxylic acid, 2-pentyl-, 5-methyl-2-(1-methylethyl) cyclohexyl ester, [IS-(1-alpha, (IR\*, ZA\*, Y.2.beta, S.alpha,)]
[SCI) (CA INDEX NAME)

Absolute stereochemistry.

(9CI) (CA INDEX NAME)

CN Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, (15,25)-105367-34-8 CAPLUS

ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

23020-15-7P 23020-18-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and esterification of) 23020-15-7 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (1S,2S)- (9CI) (CA INDEX

CN NAME)

Absolute stereochemistry. Rotation (+).

23020-18-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, {15,2R}- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

120143-47-7P 120143-48-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and esterification of, with octanol) 120143-47-7 CAPLUS

Cyclopropanecarboxylic acid, 2-pentyl-, (15-trans)- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

120143-48-8 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, (15-cis)- (9CI) (CA INDEX

L7 ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry. Rotation (+).

RN 105367-41-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-pentyl-, 5-methyl-2-(1-methylethyl)cyclohexyl ester,
[IS-(1.alpha.(1R\*,25\*),2.beta.,5.alpha.]](9C1) (CA INDEX NAME)

Absolute stereochemistry.

120047-37-2 CAPLUS Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [15-[1.aipha.(lR\*,2s\*),2.beta.,5.aipha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-42-2 CAPLUS
Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1S[1.alpha. (1R\*,2R\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

16205-72-4P 34703-00-9P 34716-60-4P 53187-86-3P 67528-63-6P 77210-35-6P 103251-54-5P 105367-35-9P 105367-39-3P 105367-37-1P 105367-38-2P 105367-39-3P 105367-40-6P 120047-39-3P 120047-39-4P 120143-36-6P 120143-39-7P 120143-41-1P 120143-43-3P 120143-44-6P 120143-45-5P 120143-36-19 120143-45-19 120143-45-19 120143-45-19 120143-51-3P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

(prepn. of) 16205-72-4 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (18,28)- (9CI) INDEX NAME)

34703-00-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, {1S,2R}- {9CI}

INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 34716-60-4 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (-).

53187-86-3 CAPLUS Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-, methyl ester, (1S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 67528-63-6 CAPLUS CN cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (15-cis)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 77210-35-6 CAPLUS CN Cyclopropanecarboxylic acid, 2-ethenyl-, (15,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 105251-54-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-ethenyl-, 5-methyl-2-(1-methylethyl) cyclohexyl ester,
[18-[1.alpha.(18\*, 25\*), 2.beta., 5.alpha.]][9CI] (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) methylethyl)cyclohexyl sster, (15,25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

105367-39-3 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1s, 2R, 5s)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1s, 2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 105367-40-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2-ethenyl-, 5-methyl-2-(1-methylethyl).cyclohexyl ester,
[18-[1.alpha,[1\*,2K\*],2.beta.,5.alpha.]}(9CI) (CA INDEX NAME)

Absolute stereochemistry.

120047-38-3 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, methyl ester, (15-trans)-(CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

105367-35-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 1,1-dimethylethyl ester, (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

105367-36-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1S,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

105367-38-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1s,2R,5s)-5-methyl-2-(1-

L7 ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

120047-39-4 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, 1-methylheptyl ester, [15-[1.alpha.(R\*),2.alpha.]]- (9CI) (CA INDEX NAME)

120143-38-6 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1s,2R,5s)-5-methyl-2-(1-methylethyllcyclohexyl ester, (1R,2s)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-39-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1s,2r,5s)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1r,2r)- (9C1) (CA INDEX NAME)

RN 120143-41-1 CAPLUS CN Cyclopropanecarboxylic acid, 2-ethenyl-, (1S-cis)- (9CI) (CA INDEX NAME)

120143-43-3 CAPLUS
Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1s[1.alpha.(1S\*,2R\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-44-4 CAPLUS Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [1s-[1.alpha.(15\*,25\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-45-5 CAPLUS Cyclopropanecarboxylic acid, 2-(2-methyl-1-propenyl)-, methyl ester, (15-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-46-6 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, methyl ester, (15-cis)-(CA INDEX NAME)

L7 ANSWER 70 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:1355.29 CAPLUS
DOCUMENT NUMBER: 110:1355.29
TITLE: Method for racemization of optically active chrystanthemic acid or its esters
INVENTOR(S): SUZUKamo, Gohfur Sakito, Yoji; Fukao, Masami
PATENT ASSIGNEE(S): SUZUKamo, Gohfur Sakito, Yoji; Fukao, Masami
DOCUMENT TYPE: PATENT INVENTARION: EPOXOD

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	A	PPLICATION NO.	DATE
			-		
EP 282221	A2	19880914	E	P 1988-301792	19880301
EP 282221	A3	19880921			
EP 282221	В1	19920115			
	DE, FR	, GB, IT,	LI, NL		
JP 63218641	A2	19880912	J.	P 1987-53519	19870309
JP 05086941	B4	19931214			
JP 63238037	A2	19881004	J	P 1987-73355	19870326
JP 05087057	B4	19931215			
HU 46879	A2	19881228	н	U 1988-1122	19880308
HU 203067	В	19910528			
US 4820864	A	19890411	U	S 1988-166014	19880309
JP 01258638	A2	19891016	J	P 1988-141175	19880607
JP 06088935	B4	19941109			
PRIORITY APPLN. INFO.			JP 1	987-53519	19870309
			JP 1	987-73355	
				987-145467	
				987-306917	
OTHER COURCE (C) .		CDEX CO. 110			
OTHER SOURCE(S):	CA	SKEACT III	1:135529	# MARPAT 110:13	15529

AB The title compds. (I, R = H, C1-20 arkyr, components) were racemized by contacting them with .gtoreq.l of the following: a carboxylic acid bromide, a Si bromide, an S-bromine compd., and N-bromine compd., a halobromine compd., or a mercaptan, and in the presence of azo compd. or peroxide. In manuf. of pyrethroid insecticides the

trans

esters have higher insecticidal activity than the cis forms, and the forms have exceedingly higher activity than the corresponding (-)

L7 ANSWER 69 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry.

120143-49-9 CAPLUS

Cyclopropanecarboxylic acid, 2-pentyl-, 1-methylheptyl ester, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-50-2 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, 1-methylheptyl ester, [1R-[1.alpha.(S\*),2.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

120143-51-3 CAPLUS Cyclopropanecarboxylic acid, 2-pentyl-, 1-methylheptyl ester, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 70 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (no data). I (R = H) (10.0 g), comprising (+)-cis-1.8, (-)-cis-

17.6, (+)-trans- 10.1, and (-)-trans- 70.5%, and 97 mg azobisisobutyronitrile were dissolved in 20 mL PhMe and 0.48 g Br in CCl4 was added dropwise

15 min at 80.degree. to give 8.73 g of a product mixt. of I (R = H) comprising (+)-cis- 3.1, (-)-cis- 3.2, (+)-trans- 44.5, and (-)-trans- 49.24.
26771-06-2P 26771-11-9P
RL: FORM (Formation, nonpreparative); FREP (Preparation) (Formation of, in racemization of chrysanthemate stereoisomer) 26771-06-2 CAPUIS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

26771-11-9 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ΙT 119479-62-8P

119479-62-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
119479-62-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester (9CI) (CA INDEX NAME)

827-90-7P 1802-02-4P 4638-92-0P 27335-32-6P 41641-25-2P

ANSWER 70 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RL: SPN (Synthetic preparation), PREF (Preparation)
(prepn. of, by racemization of stereoisomer, catalysts for)
827-90-7 CAPLUS
1802-02-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Absolute stereochemistry. Rotation (+).

RN 27335-32-6 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, methyl ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-25-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 71 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:7640 CAPLUS
DOCUMENT NUMBER: 110:7640
ITITE: donors to Regionselective catalytic addition of proton

1-alkyl-3-cyclopropenecarboxylates. 2. Catalytic reaction of methyl esters of 1-alkyl-3-cyclopropenecarboxylates with hydrogen halides

and

carboxylic acids Shapiro, E. A.; Protopopova, M. N.; Nefedov, O. AUTHOR (S): CORPORATE SOURCE:

Inst. Org. Khim. im. Zelinskogo, Moscow, USSR Izv. Akad. Nauk SSSR, Ser. Khim. (1988), (4), SOURCE: 800-6

CODEN: IASKA6; ISSN: 0002-3353

DOCUMENT TYPE: LANGUAGE:

Journal Russian CASREACT 110:7640 OTHER SOURCE(S):

AB Title compds. I [R = Me, Pr, H(CH2)5] reacted with HX (X = Cl, Br) to give (E) - and (Z)-XCH:CRCH2CO2Me, while HF, F3CCO2H, Cl3CCO2H, and Cl2CHCO2H

to, and (a)-XCH:CRCH2CO2Me, while HF, F3CCO2H, C13CCO2H, and C12CHCO2H
reacted with I to give furans II, without addn. The weaker acids R1CO2H
(R1 = H, C1CH2, vinyl, Me) gave (E)- and (2)-R1CO2CH:CRCH2CO2Me.
IT \$5701-05-6
RL: RCT (Reactant)
(cleavage-addn. reaction of, with Me
methylcyclopropenecarboxylate)
RN \$5701-05-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(9CI)
(CA INDEX NAME)

(CA INDEX NAME)

117780-74-2P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

ANSWER 70 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ΙŤ

حدية علام معرفة المعرفة المعر

Absolute stereochemistry.

15259-78-6 CAPLUS

ANSWER 71 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 117780-74-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,4-methoxy-2-methyl-4-oxo-1-butenyl ester (9CI) (CA INDEX NAME)

$$\begin{picture}(0,0) \put(0,0){\line(0,0){$\mathbb{N}_{2}$}} \put(0,0)$$

L7 ANSWER 72 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1988:525190 CAPLUS DOCUMENT NUMBER: 109:125190 TITLE: On the biosynthesis of ethylene: further evidence for stepwise enzymic cyclopropane ring cleavage Baldwin, Jack E.; Adlington, Robert M.; Lajoie, AUTHOR (S): Gilles A.; Lowe, Christopher; Baird, Pete D.; Prout, Keith CORPORATE SOURCE: Dyson Perrins Lab., Univ. Oxford, Oxford, OX1 3QY, UK SOURCE: J. Chem. Soc., Chem. Commun. (1988), (12), 775-7 CODEN: JCCCAT; ISSN: 0022-4936 DOCUMENT TYPE: Journal LANGUAGE: English
OTHER SOURCE(s): CASKEACT 109:125190
AB The conversion of a series of 2,3-dimethylated 1aminocyclopropanecarboxylates by apple tissues into mixts, of cistrans-butenes is reported; the results are in accord with a stepwise enzymic mechanism of cyclopropane ring opening. The results support the view that ethylene synthetase operates via a stepwise and homolytic mechanism in which active site topol. directs the stereochem. course of the process.
116498-04-5P
RL: RCT (Reactant); PREP (Preparation)
(prepn. and hydrolysis and amination of)
116498-04-5 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2,3-dimethyl-, monomethyl ester,
(1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME) ΙŤ Relative stereochemistry.

со2н

IT

24506-42-1P 116498-03-4P
RL: RCT (Reactant), PREP (Preparation)
(prepn. and hydrolysis of)
24506-42-1 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2,3-dimethyl-, dimethyl ester,

(8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 73 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:437522 CAPLUS
DOCUMENT NUMBER: 109:37522
TITLE: Carbon-13 labeling study of the coenzyme
B12-dependent

methylitaconate .dblarw.
.alpha.-methyleneglutarate
model rearrangement reaction and examination of
potential cyclopropane intermediates
AUTHOR(S): Dowd, Paul, Hershline, Roger
CORPORATE SOURCE: Dep. Chem., Univ. Pittsburgh, Pittsburgh, PA,
15560.

AUTHOR(S): CORPORATE SOURCE: 15260,

USA J. Chem. Soc., Perkin Trans. 2 (1988), (1), 61-70 CODEN: JCPKEH; ISSN: 0300-9580 Journal English CASREACT 109:37522 SOURCE:

DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

CO2R CO2R CH2R1 I

AB The model rearrangement mimicking the coenzyme B12-dependent, enzyme-catalyzed interconversion of .alpha.-methyleneglutaric acid with

methylitaconic acid has been carried out with a carbon-13 label. This

expt. demonstrates beyond doubt that the acrylate group is the migrating

ating group in the model, as it is in the enzyme-catalyzed rearrangement. Expts. designed to probe the possible occurrence of cyclopropylmethyl intermediates in the model rearrangement are also described. To this end

the cis- and trans-bromomethylcyclopropanediacids (I; R = H, Rl = Br) were

prepd. An extensive series of expts, involving treatment of the acids and

their Me and tetrahydropyranyl esters with vitamin B12s was carried

cut.
No methylitaconic acid could be detected in any of the reaction

mixts.

However, .alpha.-methyleneglutaric acid and methylglutaconic acid

obsd. as the reaction products. cis-I (R = Me; R1 = OTs, I) were also

also examd. and yielded results analogous to those obtained with the bromides.

11 11644-54-1P

RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (preps. and bromination of)

L7 ANSWER 72 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

116498-03-4 CAPLUS

Absolute stereochemistry.

1,1-Cyclopropanedicarboxylic acid, 2,3-dimethyl-, dimethyl ester, (25-trans)- (9CI) (CA INDEX NAME)

116381-04-5P ΙT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and reactions of)
116381-04-5 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2,3-dimethyl-, monomethyl ester,
(1.alpha.,2.alpha.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 73 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 114644-54-1 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 1-(hydroxymethyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

114644-50-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and esterification of) 114644-50-7 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 1-(bromomethyl)-, trans- (9CI) (CA INDEX NAME)

702-90-9P, 1,1,2-Cyclopropanetricarboxylic acid RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (preph. and lactonization of) 702-90-9 CAPLUS 1,1,2-Cyclopropanetricarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX

114644-51-8P 114644-58-5P
RL: RCT (Reactant): SPM (Synthetic preparation): PREP (Preparation) (prepn. and reaction of, with vitamin B12s)
114644-51-8 CAPUS
1,2-Cyclopropanadicarboxylic acid, 1-(bromomethyl)-, dimethyl ester, trans- (SCI) (CA INDEX NAME)

ANSWER 73 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) L7

114644-58-5 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-(iodomethyl)-, dimethyl ester, cis-

(9CI) (CA INDEX NAME)

Relative stereochemistry.

114644-53-OP RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and redn. of) 114644-53-0 CAPLUS 1.1,2-Cyclopropanetricarboxylic acid, 1-methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

114644-56-3P

RIGHT SPN (Synthetic preparation); PREP (Preparation)
(prepn., derivatization, and reaction of, with vitamin B12s)
11644-5-6-3 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1-(bromomethyl)-, dimethyl ester,

(9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c|c} \text{MeO} & \begin{array}{c} \text{R} \\ \end{array} \\ \begin{array}{c} \text{CH}_2\text{Br} \\ \end{array} \\ \end{array}$$

IT 114644-55-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn., esterification, and reaction of, with vitamin B12s) 116444-55-2 CAPLUS

1,2-Cyclopropanedicarboxylic acid, 1-(bromomethyl)-, cis- (9CI) (CA INDEX NAME)

L7 ANSWER 74 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:221334 CAPLUS
DOCUMENT NUMBER: 108:221334
TITLE: Hethod for racemization of chrysanthemic acid or its

esters using aluminum tribromide or boron tribromide

in the presence of azo compounds Suzukamo, Gohfu; Fukao, Masami Sumitomo Chemical Co., Ltd., Japan Eur. Pat. Appl., 7 pp. CODEN: EPXXDW INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 235940	A1	19870909	EP 1987-300842	19870130
EP 235940	B1	19900725		
R: BE, CH,	DE. FR.	GB, IT, LI,	NL	
JP 62198643	A2	19870902	JP 1986-43442	19860227
JP 05086775	B4	19931214		
US 4723035	A	19880202	US 1987-10416	19870203
HU 43993	A2	19880128	HU 1987-760	19870226
HU 201293	В	19901028		
PRIORITY APPLN. INFO	. :		IP 1986-43442	19860227
OTHER SOURCE(S):	CAS	REACT 108:221		1300022

Chrysanthemic acid and esters (I; R = H, alkyl, cycloalkylalkyl,

Al bromides in the presence of an azo compd. (-)-cis-Chrysanthemic

n-heptane, and (:NCMe2CN)2 were stirred at 80.degree. while BBr3 in n-heptane was added over 30 min. GC of the (+)-2-octyl esters at the

n-heptane was added over JW Mail. Go Or Child (), 2 or Child (), 2

L7 ANSWER 73 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

IT 114644-57-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation) (prepn., iodination, and reaction of, with vitamin B12s)
RN 114644-57-4 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid,
1-[[(4-methylphenyl) sulfonyl]oxy]methy
1]-, dimethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 74 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R-trans) - (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

64312-76-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

octyl
ester, (lR-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

84848-33-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (15-trans) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

114580-79-9 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, cis- (9CI) (CA INDEX NAME)

ANSWER 74 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

26771-06-2, (-)-cis-Chrysanthemic acid RL: RCT (Reactant) (racemization of) 26771-06-2 CAPLUS IT

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 75 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry.

88335-87-9F 110115-17-8F
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Freparation) (prepn. and lactonization of)
88335-87-9 CAPLUS
1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2S)- (9CI)

(CA

INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 110115-17-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(hydroxymethyl)-, methyl ester, (1R,2S)-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

826-34-6P, Dimethyl cis-cyclopropane-1,2-dicarboxylate
RL: RCT (Reactant) SPN (Synthetic preparation)) FREF (Preparation)
(prepn. and stereoselective hydrolysis of, by pig liver esterase,
monoacid ester from)
826-34-6 CAPLUS
1,2-Cyclopropanedicarboxylic acid, dimethyl ester, (1R,2S)-rel-

CN 1,2-0, (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 75 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1988:37543 CAPLUS MENT NUMBER: 108:37543 ACCESSION NUMBER:

DOCUMENT NUMBER:

Enzymes in organic synthesis. 39. Preparations TITLE: of

chiral cyclic acid-esters and bicyclic lactones via

stereoselective pig liver esterase catalyzed hydrolyses of cyclic meso diesters Sabbioni, Gabriele: Jones, J. Bryan Dep. Chem., Univ. Toronto, Toronto, ON, M5S 1A1, AUTHOR(S): CORPORATE SOURCE:

Can. SOURCE: J. Org. Chem. (1987), 52(20), 4565-70 CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

English CASREACT 108:37543 OTHER SOURCE(S):

Pig liver esterase-catalyzed hydrolyses of meso-dimethyl

AB Fig liver esterase-catalyzed nyrotyses of meso-dimethyl cyclobutane, and cyclobexane-1,2-dicarboxylates are enantiotopically specific, giving acid-ester products that are readily converted into .gamma.-lactones, e.g., I (n = 1-4) of >97% ee that are of value as chiral

cniral synthoms. There is a dramatic change of stereospecificity on going from

the cyclopropane and cyclobutane diesters to the cyclohexane

the cyclopropane and cycloscall control to the cyclopentane diester hydrolysis representing the changeover point within the series. This reversal of enzyme stereospecificity is explicable in terms of a two binding-pocket active-site model.

explicable in the experiment of the experiment of di-Me oxirane-1,2-dicarboxylate and of cyclopropane-1,2-diacetates

also stereoselective, giving products ee's of up to 30-70%. 88335-96-0P RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of, acid from) 88355-96-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (15,25)- (9CI)

INDEX NAME)

ANSWER 75 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

14590-54-6P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

L7 ANSWER 76 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1988:5308 CAPLUS DOCUMENT NUMBER: 108:5308 TITLE: Enantictopic-group differ

Enantictopic-group differentiation. Catalytic asymmetric ring-opening of prochiral cyclic

anhydrides

with methanol, using Cinchona alkaloids Hiratake, Jun: Inagaki, Minoru: Yamamoto, Yukio: AUTHOR(S):

Junichi Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan J. Chem. Soc., Perkin Trans. 1 (1987), (5), CORPORATE SOURCE: SOURCE:

CODEN: JCPRB4; ISSN: 0300-922X Journal English CASREACT 108:5308

DOCUMENT TYPE:

OTHER SOURCE(S):

AB Asym. ring-opening of prochiral acid anhydrides I (X = CHMeCH2CHMe, CH2CHPhCH2, etc.) with methanol has been achieved with a catalytic quantity of cinchona alkaloids II (R = H, OMe) (cinchonine, cinchonidne,

oondine, quinine, quinidine, and their epi isomers). The optically active half-ester products HO2CKCO2Me were reduced to the optically active lactones. The ring-opening rate and the selectivity depend on the nature

of the reaction medium, the polarity of solvent, and substrate concn.

selecting the reaction conditions, an enantiomeric excess of up to

been obtained. The kinetic isotope effect and other mechanistic investigations suggest that the reaction proceeds via general-base catalysis by the quinuclidine moiety of II and that the relative configuration of the C-9 hydroxy group with respect to the C-8 quinuclidine amino function dets. the selectivity of the reaction. 81873-51-0P
RL: RCT (Reactant) / SFN (Synthetic preparation) / PREP (Preparation) (prepn. and redn. of) 81873-51-0 CAPLUS

ANSWER 77 OF 139 CAPLUS COPYRIGHT 2002 ACS 55ION NUMBER: 1987:597552 CAPLUS 107:197552 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

10/:19/552
A highly asymmetric synthesis of 2phenylcyclopropanecarboxylic acid through chiral
copper(II) complex catalyzed carbenoid reaction
Cho, Nam Sook; Shin, Dae Hyun; Lee, Chong Chul;

AUTHOR(S):

Young Coll. Sci., Chungnam Natl. Univ., Daejeon, S. CORPORATE SOURCE:

Korea SOURCE:

Chungnam Kwahak Yonguchi (1985), 12(2), 131-40 CODEN: CJOSDA

DOCUMENT TYPE: Journal

LANGUAGE:

AB  $\{-\}$ -(lR,2R)-trans-Menthyl 2-phenylcyclopropanecarboxylate (I, R = menthyl)

NYI) was synthesized with the aid of a chiral Cu(II) complex catalyst by the addn. reaction of N2CHCO2R (R = menthyl) with PhCH:CH2. The

yield

was 80%, the purity of trans-compd. over 90% and optical purity 75%.

IT 42916-14-3P 67528-70-5P

RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation)

(prepn. and esterification of)

RN 42916-14-3 CAPLUS

RN 67528-70-5 CAPLUS

ANSWER 76 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 1,2-Cyclopropanedicarboxylic acid, 3,3-dimethyl-, monomethyl ester, (15,2R)- (9C1) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 81873-49-6 CAPLUS

\(\text{\subset}\) \(\text{Car\text{\subset}}\) \(\text{\subset}\) \(\

Absolute stereochemistry. Rotation (+).

L7 ANSWER 78 OF 139 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

CAPLUS COPYRIGHT 2002 ACS
1987:S97179 CAPLUS
107:197179
Stereochemical analysis of an aromatic triplet
di-.pi.-methane rearrangement
Scholl, Bernhard, Hansen, Hans Juergen
Inst. Chim. Org., Univ. Fribourg, Fribourg, AUTHOR(S): CORPORATE SOURCE: CH-1700,

Switz.
Helv. Chim. Acta (1986), 69(8), 1936-58
CODEN: HCACAV; ISSN: 0018-019X
Journal
English
CASREACT 107:197179 SOURCE:

DOCUMENT TYPE:

OTHER SOURCE(S):

It is shown that (-)-(S)-N,N-dimethyl-2-(1'-methylallyl) aniline [(-)-(S)-1], on direct irradn. in MeCN at 20.degree., undergoes in its lowest-lying triplet state an arom. di-.pi.-methane (ADPM)

rearrangement - (-10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% - 10% -

and 15 .+-. 5%, resp. The ADPM rearrangement of (-)-(5)-I to the

and cis-configured products occurs with a preponderance of the path leading to retention of configuration at the pivot atom [C(1') in the reactant and C(2') in the products] for (-)-trans-II and to inversion

configuration for (+)-cis-II, resp. The results can be rationalized bν

assuming reaction paths which involve the occurrence of discrete 1,4-

1,3-diradicals. A general anal. of such ADPM rearrangements which allow:

the classification of these photochem. reactions in terms of

borderline reline cases is presented. It is found that the optical yields in these step-by-step rearrangements are detd. by the first step, i.e. by the disrotatory bond formation between C(2) of the arom. moiety and C(2')

the allylic mide chain leading to the generation of the

diradicals. Moderation of the optical yields can occur in the ring closure of the 1,3-diradicals to the final products, which may take place with difference trans/cis-ratios for the individual 1,3-diradicals. Compds. (-)-trans/cis-ratios for the individual 1,3-diradicals.

ANSWER 78 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) as well as (+)-cis-II easily undergo the well-known photochem. trans/cis-isomerization. It mainly leads to racemization. However,

small part of the mols. shows trans/cis-isomerization with inversion

configuration at  $C(1^t)$ , which is best explained by a photochem. 

Absolute stereochemistry. Rotation (+).

RN CN NAME) 23020-18-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1S, 2R) - (9CI) (CA INDEX

Absolute stereochemistry.

34702-96-0F 34703-00-9F
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and hydrolysis of)
34702-96-0 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (15,25) - (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

34703-00-9 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1S, 2R) - (9CI)

INDEX NAME)

L7 ANSWER 79 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1987:515281 CAPLUS DOCUMENT NUMBER: 107:115281

DOCUMENT NUMBER: TITLE: Preparation of substituted cyclopropanes as pyrethroid

precursors
Woo, Edmund P.; Laux, Joseph J.
Dow Chemical Co., USA
U.S., 7 pp.
CODEN: USXXAM INVENTOR (5):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent

English

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A 19870519 U CASREACT 107:115281 US 4667050 OTHER SOURCE(S): US 1984-589798 19840315

AB The title compds. (I; A, B = CF3, halo; D = halo; X = H, C2-5 acyl, alkoxycarbonyl, cyano; Y = C2-5 alkoxycarbonyl) were prepd. as pyrethroid precursors. H2C:CHCMe2OAc and NaCH(CO2Me)2 were refluxed in THF

conty. [(PhCH:CH)2CO]2Pd(0) treated with Ph3F to give 86.1% of a 3:1 mixt.

H2C:CHCMe2CH(CO2Me)2 and (MeO2C)2CHCH2:CMe2. This mixt. was

H2C:CHCMe2CH(CO2Me) 2 and (Meo2C) 2CHCH2:CMe2. This mixt. was refluxed with Cc14 contg. CuCl and Me3CNH2 to give 90% I (A = B = D = Cl; X = Y = Co2Me). The latter (8.7 g) was heated with aq. NaOH for 5 h and the product decarboxylated upon distn. to give 5.31 g (dichlorovinyl) cyclopropanecarboxylate II.

IT 64507-48-8P RI: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation) (prepn. and decarboxylation of)
RN 64507-48-8 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(9CI) (CA INDEX NAME)

L7 ANSWER 78 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry. Rotation (+).

RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and redn. of, with lithium aluminum hydride) 16205-724 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (15,25)- (9CI) RN CN (CA

INDEX NAME)

Absolute stereochemistry.

67528-63-6 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (15-cis)- (9CI) RN CN (CA

INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 79 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT

55701-05-BP 82817-08-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as pyrethroid precursor)
55701-05-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-CN (9CI)

(CA INDEX NAME)

RN 82817-08-1 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid,
2,2-dimethyl-3-(2,2,2-trichloroethyl)-,
dimethyl ester (9C1) (CA INDEX NAME)

L7 ANSWER 80 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1987:478110 CAPLUS
DOCUMENT NUMBER: 1107:78110
TITLE: New synthesis method of chlorine-containing
pyrethroid

insecticides INVENTOR(S):

Gu, Kequan Peop. Rep. China Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 PATENT ASSIGNEE(S): SOURCE:

pp. CODEN: CNXXEV Patent Chinese 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE

APPLICATION NO. DATE CN 85100500 A 19860813 CN 1985-100500 19850401

CO2R

AB The title compds. [I; R = p-MeOC6H4CH2 (Q), m-PhOC6H4CH2, m-PhOC6H4CH(CM)] are prepd. via phase-transfer catalyzed cycloaddn. of Me2C:CHC02Et

with

with CRC13 and esterification of I (R - H) with the appropriate aralkyltriethylammonium chlorides. A mixt. of Me2C:CHCOMe, FhCH2NBt3C1 (II), and sq. NaOC1 was stirred with cooling for 3-4 h to give, after acidification with H2SO4, >60% Me2C:CHCO2H. Me2C:CHCO2Et was heated with

with CHCl3, II, and 50% aq. NaOH at 20-80.degree. for 5-7 h to give >60%

I (R

Et). I (R = H) was refluxed with QNEt3Cl in toluene-aq. NaOH for 4-6 h

4-6 h to
give >70% I (R = Q).

IT 39939-04-3P
RL: RCT (Reactant); SPN (Synthetic preparation), PREP (Preparation)
(prepn. and decompn. of)
RN 39939-04-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-, sodium salt
(SCI)

(9CI) (CA INDEX NAME)

L7 ANSWER 80 OF 139 CAPLUS COPYRIGHT 2002 ACS

C- O- CH2-

55931-15-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

65384-77-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-, (3-phenoxyphenyl)methyl

(9CI) (CA INDEX NAME)

Me C-o-cH<sub>2</sub>

ANSWER 80 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Na

IT

39871-97-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and esterification of, with benzyltriethylammonium

(prepn. and esterilication of, with benzyltriethylammonium chlorides)
RN 39871-97-1 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl- (9CI) (CA RN CN INDEX

NAME)

39872-14-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of)
39872-14-5 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-, ethyl ester

(CA INDEX NAME)

42197-70-6P 55931-15-2P 65384-77-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as pyrethroid insecticide)
42197-70-6 CAPUE
(Zyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
(3-methoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 81 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1987:438945 CAPLUS
DOCUMENT NUMBER: 107:38945
TITLE: Alkylation of carbon-hydrogen acids in the

presence of potassium carbonate. I. Alkylation of

carbon-hydrogen

acids with ethyl .alpha.-bromoacrylate and its derivatives Vardapetyan, A. A.; Khachatryan, D. S.; Panosyan,

AUTHOR(S):

A.: Morlyan, N. M.
USSR
2h. Org. Khim. (1986), 22(11), 2262-6
CODEN: ZORKAE; ISSN: 0514-7492
Journal
Russian
CASREACT 107:38945 CORPORATE SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

Treating CH2(CO2Et)2, MeCOCH2COR (R = Me, EtO), dimedone, or Me2CO AB with

CH2:CBrCO2Et and its derivs. in the presence of K2CO3 gave the corresponding cyclopropanes, e.g. I, and dihydrofurans, e.g., II and

838-39-4P 1991-42-0P 22811-70-7P 108967-76-6P 108967-77-7P 108967-80-2P RL: SFN (Synthetic preparation); PREP (Preparation) (prepn. of) 839-39-4 CAPLUS

RN CN 9CI) 1,1,2-Cyclopropanetricarboxylic acid, triethyl ester (6CI, 7CI, 8CI,

(CA INDEX NAME)

1991-42-0 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1-acetyl-, diethyl ester (7CI, 9CI) (CA INDEX NAME)

RN 22811-70-7 CAPLUS CN Cyclopropanecarboxylic acid, 2-benzoyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

108967-76-6 CAPLUS 1,1,2,3-Cyclopropanetetracarboxylic acid, tetraethyl ester, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 108967-77-7 CAPLUS

L7 ANSWER 81 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) CN Cyclopropanecarboxylic acid, 2,2-diacetyl-, ethyl ester (9CI) (CA CN NAME)

108967-80-2 CAPLUS 1,1,2,3-Cyclopropanetetracarboxylic acid, tetraethyl ester, trans-RN CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 82 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1987:33330 CAPLUS
DOCUMENT NUMBER: 106:33330
TITLE: 50 optically active cyphenothrin-14C.
Carbon-14 labeling
Kanamaru, Hiroshiy Kamada, Takeshiy Yoshitake,

AUTHOR(S): Akira;

Nakatsuka, Iwao
Takarazuka Res. Cent., Sumitomo Chem. Co., Ltd.,
Takarazuka, Japan
Radiolsotopes (1986), 35(3), 103-8
CODEN: RAISAB; ISSN: 0033-8303
Journal
English
CASREACT 106:33330 CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

AB The syntheses of (1R)-cis-(I) and (1R)-trans-(carbonyl-14C) cyphenothrin

enothrin (II) for use in metab. studies is described. Cyanation of N-chloromethylphthalimide with K14CN followed by acidic hydrolysis

of the resulting [14C]cyanomethylphthalimide gave [1-14C]glycine-HCl in 65% yield. Esterification followed by condensation of Et [1-14C]diazoacetate, derived from Et [1-14C]glycinate-HCl, with 2,5-dimethyl-2,4-hexadlene in the presence of Cu catalyst and subsequent basic hydrolysis gave a mixt. of dl-cis- and dl-trans-[14C]chrysanthemic acids. The geometrical

strical isomers were sepd. by silica gel column chromatog, and then optically resolved to give (IR)-cis- and (IR)-trans-[14C]chrysanthemic acids. Esterification of the acids with .alpha.-cyano-3-phenoxybenzyl de in

bromide in the presence of Bu4N+Br- as phase transfer catalyst gave I and

Absolute stereochemistry.

II.

11. 32511-06-1P 106091-84-3P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and esterification with cyanophenoxybenzyl bromide)
RN 32511-06-1 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(1R-trans)- (9CI) (CA INDEX NAME)

L7 ANSWER 82 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

106091-84-3 CAPLUS Cyclopropanecarboxylic-14C acid, dimethyl-3-(2-methyl-1-propenyl)-(1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

105851-30-7P 105851-32-9P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation) (prepa. and hydrolysis of) 105851-30-7 CAPLUS Cyclopropanecarboxylic-14C acid, -d.imethyl-3-(2-methyl-1-propenyl)-, ethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 105851-32-9 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-(2-methyl-1-propenyl)-,
ethyl ester, trans- (9CI) (CA INDEX NAME)

IT 62623-80-7P 62623-81-8P
RL: SPN (Synthetic preparation); PREP (Preparation) (preps. and resoln. of)
RN 62623-80-7 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 62623-81-8 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-(2-methyl-1-propenyl)-,
trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 105e51-31-eP
RL: SPM (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 105e51-31-8 CAPLUS
CN Cyclopropanecarboxylic-14C acid,
2,2-dimethyl-3-(2-methyl-1-propenyl)-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

INVENTOR(S): PATENT ASSIGNEE(S): Rt.,

L7 ANSWER 83 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1987:17957 CAPLUS
DOCUMENT NUMBER: 106:17957
CYCLOPropanecarboxylic acid salts and their application
INVENTOR(S): Lindwurm, Ferenc; Muskovits, Jozsef
Chinoin Gyogyszer es Vegyeszeti Termekek Gyara

Hung. Teljes, 14 pp. CODEN: HUXXEU Patent Hungarian

SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A2 19851228 B 19950628 HU 1983-3198 19830915 HU 37382 HU 210648

 $(R^1)_2C:CH-CO_2R$ 

The cyclopropanecarboxylates I (R = C1-4 alkyl; R1 = halo, Me) are

d. as insecticides and fungicides (no data) by reacting a diazoacetate NZCHCO2R with a pentadiene (R1)2C:CHCH:CMe2 in the presence of the

wachooks with a pencadiene (RI) ACTCHCHICMe2 in the presence Cu salt of a cycloalkanecarboxylate, preferably I (R = Cu). Thus, Cl2C:CHCH:CMe2

CHCH:CMe2 with N2CHCO2Et at 110.degree., in the presence of Cu permethrate (prepn. given), to give I (R = Et, RI = Cl). I (R = Cu)

IT

themselves pesticides.
104119-56-4P 104119-57-5P
RL: SFN (Synthetic preparation); PREP (Preparation) (prepn. of, as Catalyst and pesticide)
104119-56-4 CAPLUS

TO4119-50-4 CAPLOS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
copper(2+) salt (9CI) (CA INDEX NAME)

ANSWER 83 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

●1/2 Cu(II)

104119-57-5 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, copper(2+) salt (9CI) (CA INDEX NAME)

●1/2 Cu(II)

IT 97-41-6P, Ethyl chrysanthemate 59609-49-3P, Ethyl

permethrate
RL: AGR (Agricultural use); BAC (Biological activity or effector,

Authors (Aglicuttural action), M.C. (All (Biological study), PREP (Preparation); USES (Uses) (prepn. of, as pesticide) 97-41-6 (ACPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester (9CI) (CA INDEX NAME)

59609-49-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, ester (9CI) (CA INDEX NAME)

ANSWER 83 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT

10453-69-1, Chrysanthemic acid 55701-05-8
RL: RCT (Reactant)
(reaction of, with copper sulfate)
10453-89-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-RN CN (9CI)

(CA INDEX NAME)

RN CN (9CI) 55701-05-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-

(CA INDEX NAME)

ANSWER 84 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 103709-29-1 CAPLUS Cyclopropanecarboxylic acid, 1-{1,2,3,4-tetrahydro-4,7-dimethyl-1-naphthalenyl}-, methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 84 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1986: 497712 CAPLUS DOCUMENT NUMBER: 105:97712 AD acid

An acid-catalyzed molecular rearrangement of a quaiane

to a cadinane skeleton Kalsi, P. S.; Handa, Renu Dep. Chem., Punjab Agric. Univ., Ludhiana, 141 AUTHOR(S): CORPORATE SOURCE: 004,

India Indian J. Chem., Sect. B (1985), 24B(6), 657-8 CODEN: IJSBDB; ISSN: 0376-4699 SOURCE:

Journal

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI English CASREACT 105:97712

AB The spirocyclopropylguaianolide I, derived from dehydrocostus lactone, undergoes acid-catalyzed rearrangement to afford acid II with a

undergoes accu----cadinane
skeleton.
IT 103709-28-0P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in rearrangement of guaianolide)
RN 103709-28-0 CAPIUS
CN Cyclopropanecarboxylic acid, 1-(1,2,3,4-tetrahydro-4,7-dimethyl-1naphthalenyl) - (9CI) (CA INDEX NAME)

103709-29-1P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

L7 ANSWER 85 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1986:109977 CAPLUS
DOCUMENT NUMBER: 104:109977 CAPLUS
104:109977 CAPLUS
104:109977 CAPLUS
104:109977 CAPLUS
CORPORATE SOURCE: Synthesis of bicyclogermacrene and lepidozene
McMurry, John E., Bosch, Gregory K.
Dep. Chem., Cornell Univ., Ithaca, NY, 14853, USA
Tetrahedron Lett. (1985), 26(18), 2167-70
CODEN: TELEAY: ISSN: 0040-4039
JOURNAL LANGUAGE: Journal Language Bilish
OTHER SOURCE(S): CASREACT 104:109977

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

AB Bicyclogermacrene (I) and reproduce ..., routes from geranylacetone via Ti-induced cyclizations of cis- and Bicyclogermacrene (I) and lepidozene (II) were synthesized by short

trans-2,2-dimethyl-3-(3-methyl-7-oxo-3E-octenyl) cyclopropanecarbaldehyde.

IT 100693-04-7P 100762-50-3P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation)
(prepn. and esterification of)
RN 100693-04-7 CAPLUS
CN Cyclopropanecarboxylic acid,
2,2-dimethyl-3-(3-methyl-7-oxo-3-octenyl)-,
[1.alpha.,3.alpha.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 100762-50-3 CAPLUS
CN Cyclopropanecarboxylic acid,
2,2-dimethyl-3-(3-methyl-7-oxo-3-octenyl)-,
[1.alpha.,3.beta.(E)]- (9CI) (CA INDEX NAME)

L7 ANSWER 85 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry. Double bond geometry as shown.

100693-07-0P 100762-51-4P RL: RCT (Reactant) SPN (Synthetic preparation); PREP (Preparation) (prepn. and redn. of) 100693-07-0 CAPLUS ΙT

NN 100893-07-0 CAPLOS CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(3-methyl-7-oxo-3-octenyl)-, methyl ester, [1.alpha.,3.alpha.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 100762-51-4 CAPLUS
CN Cyclopropanecarboxylic acid,
2,2-dimethyl-3-(3-methyl-7-cxo-3-octenyl)-,
methyl ester, [1.alpha.,3.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

ANSWER 86 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) acid (.+-.)-IV (R1 = OH) and III were esterified by DCC in CH2C12 to

diastereomers of IV [R1 = (S)-OCH(CN)C6H4OPh-3].
53179-78-5 55701-05-9 55701-07-0
68127-59-3 76023-99-9 88419-72-1
RL: RCT (Reactant)
(esterification of, by cyano(phenoxy)benzyl alc. enantiomer)
53179-78-5 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

55701-06-9 CAPLUS 55701-07-0 CAPLUS 68127-59-3 CAPLUS Cyclopropanecarboxylic acid, [(12)-2-chiner-3-3,3-trifluoro-1-propenyl]-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry. Double bond geometry as shown.

RN 76023-99-9 CAPLUS
CN Cyclopropanecarboxylic acid,
3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]2,2-dimethyl-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

88419-72-1 CAPLUS CN Cyclopropanecarboxylic acid, 3-[2-chloro-2-(4-chlorophenyl)ethenyl]-2,2-dimethyl- (9CI) (CA INDEX NAME) ANSWER 86 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1986:68624 CAPLUS
104:68624 captus

Alpha.-Substituted .alpha.-cyanomethyl alcohol
enantiomers
SIOTOR(S): Jackson, William Roy
ICI Australia Ltd. , Australia
ECE: Brit. UK Fat. Appl., 33 pp.
CODEN: BAXKDU
MENT TYPE: Patent

DOCUMENT NUMBER: TITLE:

INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent English 2 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

GΙ

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2143823	A1	19850220	GB 1984-18611	19840720
GB 2143823	B2	19880323		
AU 8430331	A1	19850124	AU 1984-30331	19830722
AU 576322	B2	19880825		
ZA 8405371	A	19850227	ZA 1984-5371	19840711
JP 60042359	A2	19850306	JP 1984-149786	19840720
BR 8403630	A	19850709	BR 1984-3630	19840720
HU 36782	A2	19851028	HU 1984-2811	19840720
HU 198678	В	19891128		
IL 72459	A1	19880229	IL 1984-72459	19840720
CA 1258075	A1	19890801	CA 1984-459489	19840723
GB 2186280	A1	19870812	GB 1987-1511	19870123
GB 2186280	B2	19880323		
PRIORITY APPLN. INFO.	:		AU 1983-432	19830722
			AU 1983-2758	19831218
			GB 1984-18611	19840720

The title cyanohydrins RCH(CN)OH (I; R = alkenyl, alkynyl, aryl, heteroaryl) were prepd. by reaction of RCHO with HCN in the presence AB

cyclic dipeptide enantiomers below ambient temp. Thus, HCN added to 3-PhOC6H4CHO at ice bath temp. in the presence of piperazinedione II

give (S)-I (R = 3-PhOC6H4)(III) in 70% enantiomeric excess. II was

prepd.
in 4-5 steps from (R)-phenylalanine and (R)-histidine-HCl. I are
useful
intermediates in the prepn. of chiral esters and ethanolamines,
particularly pyrethroids and arylethanolamines. For example,
pyrethroid

ANSWER 86 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

52918-63-5P 65731-04-2P 65732-07-2P
69770-44-1P 72204-43-4P 76703-62-3P
83860-31-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
52918-63-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-,
(S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX
)

65731-84-2 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, (5)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

65732-07-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,(S)-cyano(3-phenoxyphenyl)methyl ester, (IR,3S)- (9CI) (CA INDEX NAME)

69770-44-1 CAPLUS
Cyclopropanecarboxylic acid,
-chloro-2-(4-chlorophenyl)ethenyl]-2,2dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

72204-43-4 CAPLUS
Cyclopropanecarroxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,(3)-cyano(3-phenoxyphenyl)methyl ester, (15,35)- (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

RN 76703-62-3 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [IR[1.alpha.(S\*),3.alpha.(Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1985:471551 CAPLUS
DOCUMENT NUMBER: 103:71551
Chiral copper complex and asymmetric synthesis of cyclopropanecarboxylate derivatives using this

complex

INVENTOR(S):

as catalyst
Aratani, Tadatoshi, Yoshihara, Hiroshi; Susukamo,
Gohfu
Sumitomo Chemical Co., Ltd., Japan
Eur. Pat. Appl., 25 pp.
CODEN: EFXXDW
Patent
English
1

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

KIND DATE PATENT NO. APPLICATION NO. DATE A2 19841212
A3 19850731
B1 19861120
GB, IT
A2 19841218
B4 19891115
A 19851112 EP 120012 EP 1984-303662 19840531 EP 128012 EP 128012 R: DE, FR, GB, JP 59225194 A JP 1983-99955 19830603 JP 01053850 US 4552972 US 1984-614224 US 1985-760507 JP 1983-99955 19840524 19850730 19830603 19851112 US 4603218 PRIORITY APPLN. INFO.: 19860729 US 1984-614224 19840524 OTHER SOURCE(S): CASREACT 103:71551

$$\begin{array}{c|c} R^2 & & & R^1 \\ \hline R^3 & & & & \\ R^3 & & & & \\ \end{array}$$

AB Chiral Cu complexes I [R = alkyl, aralkyl, Rl = alkoxyphenyl, alkoxyalkylphenyl; R2, R3 = H, halo, alkyl, alkoxy, nitro, R2R3 may

form a benzo ring] reacted with R4NHNH2 [R4 = aralkyl, alkyl, aryl] to form chiral catalysts for the prepn. of optically active chrysanthemates from N2CHCO2RS (RS = alkyl) and prochiral olefins.

Thus, to a mixt. of 0.40 g (+)-I [R = PhCH2, R1 = 2,5-(BuO)Me3CC6H3, R2 =

H), 14 g isobutylene, 0.3 mL PhNHNH2, and toluene was added 16.15 g N2CH2CO2Et in toluene at 40.degree. over 7 h while 33 g isobutylene

was blown into the soln. and the resulting mixt. heated to 80.degree. (to

ANSWER 86 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$F_3 \subset \begin{array}{c} C1 & \text{Me} & \text{Me} \\ \hline 2 & R & \text{OPh} \\ \hline \end{array}$$

83860-31-5 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, (S)-cyano{3-phenoxyphenyl}methyl ester, (1S,3R)- (9CI) (CA INDEX

Absolute stereochemistry.

ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) remove excess isobutylene) to give 16.5 g (+)-Et 2, 2-dimethylcyclopropanecarboxylate with 88.0% optical purity. 946-38-94 1802-02-4P 7317-84-6F 59160-05-3P 59160-06-4P 60254-14-0F 63314-51-2P 94061-28-6F 96393-68-9F 97250-05-0F 97250-06-1P RE: RCT (Reactant): PSN (Synthetic preparation): PREP (Preparation) (prepn. and hydrolysis of) 946-38-3 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)-rel-)

RN CN (9CI)

(CA INDEX NAME)

Relative stereochemistry

RN 946-39-4 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

1802-02-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

7377-84-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

RN 59160-05-3 CAPLUS
CN cyclopropanecarboxylic acid, 2-hexyl-, ethyl ester, (1R,2S)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

59160-06-4 CAPLUS Cyclopropanecarboxylic acid, 2-hexyl-, ethyl ester, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

60254-14-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

97250-06-1 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, ethyl ester, cis-(-)-(CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

939-89-9P 939-90-2P 51378-31-5P 59213-08-0P 63254-59-1P 63323-87-5P 63323-88-6P 63323-89-7P 68852-56-2P 68552-58-4P 68652-59-5P 7417-15-4P 97250-04-9P 97277-14-0P 97642-76-7P IT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 939-89-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

939-90-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 63314-51-2 CAPLUS
Cyclopropanearchoxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, ethyl

ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

94061-28-6 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1,1-dimethylethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

96393-68-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1-dimethylethyl ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

97250-05-0 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, ethyl ester, trans-(-)-(9C1) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

L7 ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

51378-31-5 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, cis-(-)- (9CI) (CA NAME)

Rotation (-). Absolute stereochemistry unknown.

59213-08-0 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester (SCI) (CA INDEX NAME)

63254-59-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(S\*),3.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

63323-87-5 CAPLUS

Cycloropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(S\*),3.alpha.]]- (9CI) (CA INDEX

63323-88-6 CAPLUS 53323-84-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-{2-methyl-1-propenyl}-, 1-methylheptyl ester, [1S-[1.alpha.(R\*),3.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1S-[1.alpha.(R\*),3.alpha.]]- (9CI) (CA INDEX

Absolute stereochemistry.

68852-56-2 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
1-methylheptyl ester, [1S-[1.alpha.(R\*),3.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) NAME)

Rotation (-). Absolute stereochemistry unknown.

97277-14-0 CAPLUS Cyclopropanecarboxylic acid, 2-hexyl-, cis- (9CI) (CA INDEX NAME) Relative stereochemistry.

R (CH<sub>2</sub>) 5 Me

97642-76-7 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-, ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

ANSWER 87 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

68852-58-4 CAPLUS 58892-58-4 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester, [1S-[1.alpha.(R\*),3.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

68852-59-5 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,1-methylheptyl ester, [1R-[1.alpha.(S\*),3.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

74177-15-4 CAPLUS Cyclopropanecarboxylic acid, 2-hexyl-, trans- (9CI) (CA INDEX NAME) Relative stereochemistry.

97250-04-9 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, trans-(-)- (9CI) (CA

L7 ANSWER 88 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1985:454529 CAPLUS
DOCUMENT NUMBER: 103:54529
TITLE: Polymers with cycloaliphatic units in the chain
AUTHOR(S): Bulacovschi, V.; Simionescu, C. I.
Dep. Macromol. Chem., Polytech. Inst. Iassi,

6600, Rom. J. Macromol. Sci., Chem. (1985), A22(5-7), 561-77 CODEN: JMCHBD, ISSN: 0022-233X

CODEN: JMCHBD; ISSN: UU42-230x

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This paper describes the synthesis and characterization of some polycondensation polymers (polyamides and polyesters) which contain cycloaliph. units in their chains. Syntheses were carried out by low-temp. polycondensation techniques (interfacial and soln.) and

also by
the Yamazaki method in N-methylpyrrolidinone-pyridine soln. using

the Yamazaki method in n-methylpyriolidinone pyriolid both. The phosphite catalyst. The products obtained were characterized by elemental anal., IR spectroscopy, and x-ray diffraction. Thermoanal.

data
have shown very good thermal properties for all products, but esp.
for the
arom. cycloaliph. polyamides, which were stable up to 400.degree..

IT 83458-25-7P 83458-26-8P 83458-27-9P
97464-36-3P 97464-37-4P 97464-38-5P
97466-36-3P 97464-40-9P
RL: PRP (Properties): SFN (Synthetic preparation): PREP (Preparation)
(prepn. and properties of)
RN 83458-25-7 CAPLUS
CN Poly(oxy-1,4-phenyleneoxycarbonyl-1,2-cyclopropanediylcarbonyl),
trans-

(9CI) (CA INDEX NAME)

83458-26-8 CAPLUS
Poly[(3-oxo-1(3H)-isobenzofuranylidene)-1,4-phenyleneoxycarbonyl-1,2cyclopropanediylcarbonyloxy-1,4-phenylene), trans- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
RN 83458-27-9 CAPLUS
CN Poly(conycarbonyl-1,2-cyclopropanediylcarbonyloxy-1,4-phenylene(1-mathylethylidene)-1,4-phenylene), trans- (9CI) (CA INDEX NAME)

97464-36-3 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, trans-, polymer with 2-methyl-1,4-benzenediamine (SCI) (CA INDEX NAME)

CM 1

CRN 697-49-4 CMF C6 H8 O4 CDES 2:TRANS

Relative stereochemistry.

CM 2

CRN 95-70-5 CMF C7 H10 N2

97464-37-4 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, trans-, polymer with 4,4'-methylenebis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 697-49-4 CMF C6 H8 O4 CDES 2:TRANS

L7 ANSWER 88 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

CRN 696-75-3 CMF C5 H6 O4 CDES 2:TRANS

Relative stereochemistry.

CM 2

CRN 95-70-5 CMF C7 H10 N2

97464-40-9 CAPLUS 1,2-Cyclopropanedicarboxylic acid, trans-, polymer with 4,4'-methylenebis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 696-75-3 CMF C5 H6 O4 CDES 2:TRANS

Relative stereochemistry.

CM 2

CRN 101-77-9 CMF C13 H14 N2

L7 ANSWER 88 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

CM 2

97464-38-5 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, trans-, polymer with 1,4-benzenediamine (9CI) (CA INDEX NAME)

CRN 697-49-4 CMF C6 H8 O4 CDES 2:TRANS

Relative stereochemistry.

CM 2

CRN 106-50-3 CMF C6 H8 N2

97464-39-6 CAPLUS 1,2-Cyclopropanedicarboxylic acid, trans-, polymer with 2-methyl-1,4-benzenediamine (9CI) (CA INDEX NAME)

L7 ANSWER 88 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 89 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1985:5943 CAPLUS DOCUMENT NUMBER: 102:5943

Optically active cyanomethyl esters Stoutamire, Donald W.; Tieman, Charles H.; Dong, TITLE: INVENTOR(S):

Walter Shell Oil Co., USA Eur. Pat. Appl., 42 pp. CODEN: EPXXDW PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent English 2

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA:	TENT NO.		KIND	DATE		APPLICATION NO.	DATE
EP	109681		A2			EP 1983-111562	
EP	109681			19860115			
EP	109681		B1	19920311			
	R: AT,	BE,	CH, DE	, FR, GB,	IT,	LI, LU, NL, SE	
IN	161692		À	19880116		IN 1983-CA1346 IL 1983-70155 US 1983-551547 US 1983-551548 BR 1983-6312 DD 1983-256815	1983110
ΙL	70155		A1	19890910		IL 1983-70155	1983110
US	4582646		A	19860415		US 1983-551547	1983111
US	4594196		A	19860610		US 1983-551548	1983111
BR	8306312		A	19840703		BR 1983-6312	1983111
DD	216453		A5	19841212		DD 1983-256815	1983111
EP	291626		A2	19881123		EP 1988-100324	1983111
EP	291626		A3	19890531			
	R: AT,	BE,	CH, DE	, FR, GB,	IT,	LI, LU, NL, SE	
	312124					EP 1988-119480	1983111
EP	312124		A3	19890913			
	R: AT,	BE,	CH, DE	, FR, GB,	IT,	LI, LU, NL, SE	
EP	451927		A1	19911016		EP 1991-201451	1983111
	R: AT,	BE,	CH, DE	, FR, GB,	IT,	LI, LU, NL, SE	
ΑT	73443		E	19920315		AT 1983-111562 FI 1983-4259 DK 1983-5323 NO 1983-4257 AU 1983-21555	1983111
FI	8304259		A	19840523		FI 1983-4259	1983112
DK	8305323		A	19840523		DK 1983-5323	1983112
NO	8304257		A	19840523		NO 1983-4257	1983112
ΑU	8321555		A1	19840531		AU 1983-21555	1983112
ΑU	577032		B2	19880915			
JΡ	59116256		A2	19840705		JP 1983-220485	1983112
JΡ	03033151		B4	19910516		ES 1983-527417	
ES	527417		A1	19851101		ES 1983-527417	1983112
HU	37915		A2	19860328		HU 1983-4003	1983112
HU	200584 88828		В	19900728			
RO	88828		В3	19860730		RO 1983-112615	1983112
CA	1263800		A1	19891205		CA 1983-441540	1983112
SŲ	1542412 4723027		A3	19900207		SU 1983-3675006	1983112
US	4723027		A	19880202		US 1986-822563 JP 1989-302306	1986012
				19901105		JP 1989-302306	1989112
	03238053			19911023		JP 1990-164329	1990062
RITY	APPLN. 1	INFO.	:		t	US 1982-443513 US 1982-443763 US 1982-443764	1982112
					ti	IS 1982-443763	1982112
					u	IS 1982-443764	1982112
					u	IS 1983-551548	1983111
					E	P 1983-111562	1983111
R SC	URCE(S):		CA	SREACT 10:	2:594	13	

ANSWER 89 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 89 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

(S)-.alpha.-Cyano alcs. I (R, R1, R2 = H, halo, C1-6 alkyl or alkoxy, halo-substituted C1-6 alkyl or alkoxy) were prepd. by treating (un)substituted 3-PhOC6H4CHO (II) with an HCN source in the presence AB

n
H2O-immiscible aprotic solvent and cyclo(D-Phe-D-His) (III)
catalyst. Thus, II was treated with HCN in the presence of III in
toluene to give 80% (S)-3-PhOC6H4CH(OH)CN. The latter was o-acylated

with

(S)-4-ClC6H4CH(CHMe2)COCl to give the (S,S)-isomer of ester IV. 55667-40-8
RL: RCT (Reactant)
(esterification of, with cyanophenoxybenzyl alc.)
55667-40-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Absolute stereochemistry. Rotation (+).

L7 ANSWER 90 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:510412 CAPLUS
DOCUMENT NUMBER: 101:110412
TITLE: Cyclopropane compounds
INVENTOR(S): Scholes, Gary
PATENT ASSIGNEE(S): Shell Internationale Reso 101:110412 Cyclopropane compounds Scholes, Gary Shell Internationale Research Maatschappij B. V., Neth. Brit. UK Pat. Appl., 6 pp. CODEN: BAXXDU

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English 1

DATE APPLICATION NO. DATE GB 2127012 US 4489005 PRIORITY APPLN. INFO.: OTHER SOURCE(S): A1 19840404 A 19841218

AB The acid-catalyzed cyclization of 4,6,6,6-tetrahalohexancic acid derivs.

gave cyclopropanecarboxylic acid derivs. I (each R is Cl, Br, Rl = H, metal cation, alkyl). A mixt. of CCl3CH2CHClCMe2CH(CN)CO2Et and HCl

Was heated at .apprx.100.degree. to give I (R = Cl, Rl = Et).

IT 80436-36-8P 80441-85-6P 91814-46-9P
91814-47-0P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
RN 80436-36-8 CAPLUS
CN Cyclopropanecarboxylic acid,
1-cyano-2, 2-dimethyl-3-(2,2,2-trichloroethyl), cis- (9Cl) (CA INDEX NAME)

Relative stereochemistry.

RN 80441-85-6 CAPLUS
CN Cyclopropanecarboxylic acid,
1-cyano-2,2-dimethyl-3-(2,2,2-trichloroethyl)-

L7 ANSWER 90 OF 139 CAPLUS COPYRIGHT 2002 ACS , trans- (9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry.

91814-46-9 CAPLUS CN Cyclopropanecarboxylic acid, 1-cyano-2,2-dimethyl-3-(2,2,2-trichloroethyl)-, ethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 91814-47-0 CAPLUS
CN Cyclopropanecarboxylic acid,
1-cyano-2,2-dimethyl-3-(2,2,2-trichloroethyl), ethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 91 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 1-acetyl-2-butyl-, ethyl ester (9CI) INDEX NAME)

IT

90284-92-7 CAPLUS Cyclopropanecarboxylic acid, 2-butyl-1-chloro-, ethyl ester (9CI) INDEX NAME)

90284-96-1 CAPLUS Cyclopropanecarboxylic acid, 1-acetyl-2-butyl- (9CI) (CA INDEX NAME)

ANSWER 91 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1984:209194 CAPLUS

LE: 00:209194 Oxidative addition of 1,3-dicarbonyl compounds to olefins in the presence of the manganese(III) accetacylithium chloride system and synthesis of functionally substituted cyclopropanes

Vinogradov, M. G.; Dolinko, V. I.; Nikishin, G. I. Inst. Org. Khim., Mescow, USSR

CE: 1zv. Akad. Nauk SSSR, Ser. Khim. (1984), (2), DOCUMENT NUMBER: TITLE: AUTHOR (S): CORPORATE SOURCE: SOURCE: 375-83

CODEN: IASKA6; ISSN: 0002-3353 DOCUMENT TYPE: Journal LANGUAGE: OTHER SOURCE(S): Russian CASREACT 100:209194

AB The title reaction of RCOCH2COR1 (R = R1 = Me, EtO; R = Me, R1 = OEt) with  $\frac{1}{2}$ 

R2CH:CHR3  $\{R2 = H, R3 = H, Bu, Ph; R2R3 = (CH2)4\}$  in AcOH gave mixts.

the corresponding RCOCX(COR1)CHR2CHC1R3 [X = H, C1(I)] and/or acyldihydrofurans II ratios which varied with R-R3. Cyclohexene also

gave
trans-1,2-dichlorocyclohexane and 3-acetoxycyclohexene under the
reaction
conditions. I cyclized in 50% aq. KOH-C6H6 contg. PhCHZNEt3+ C1- or
18-crown-6 or with Zn to give mono- and diacylcyclopropanes, e.g.,

18-crown-6 or with Zn to give mono- and diacylcyclopropanes, e.g.,
III (X
= Cl, RlCO; same R, Rl).
IT 72435-01-99 9024-95-0P
Rl: RCT (Reactant); SPM (Synthetic preparation); PREP (Preparation)
(prepn. and cyclization of)
RN 72435-01-9 CAPIUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-butyl-, diethyl ester (9CI) (CA
INDEX NAME)

RN 90284-95-0 CAPLUS

L7 ANSWER 92 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1984:208635 CAPLUS DOCUMENT NUMBER: 100:208635 Rearrangements of the control of the control

Rearrangements of ylides generated from reactions

diazo compounds with allyl acetals and thicketals

catalytic methods. Heteroatom acceleration of the [2,3]-sigmatropic rearrangement Doyle, Michael P.; Griffin, John H.; Chinn,

Mitchell

S., Van Leusen, Daan

CORPORATE SOURCE: J. Org. Chem., Hope Coll., Holland, MI, 49423, USA

SOURCE: J. Org. Chem. (1984), 49(11), 1917-25

CODEN: JOCEAN: ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASRACT 100:208635

AB Allyl acetals undergo ylide generation in Rh2(OAc)4-catalyzed

reactions

with diazo esters with subsequent prodn. of 2,5-dialkoxy-4-alkenoates

by

the [2,3]-sigmatropic rearrangement in moderate to good yields. The synthetic versatility of this class of polyfunctional compds is examd.

with selected transformations. Cyclopropanation and Stevens

rearrangement compete with the [2,3]-sigmatropic rearrangement in certain cases, and the

influence of reactant structure and reaction conditions on this competition is discussed. Comparative results with allyl ethers,

undergo cyclopropanation almost exclusively, demonstrate that

heteroatom substitution on the allylic C atom accelerates ylide rearrangement.

dithioketals such as 2-ethenyl-2-methyl-1,3-dithiane, the ylide

outhlowetals such as 2-ethenyl-2-methyl-1,3-dithiane, the ylic generated from Rh2(OAc)4-catalyzed reactions of N2CHCO2Et undergoes [2,3]-sigmatropic rearrangement in competition with intramol. elimination.

elimination,
but without evidence of either cyclopropanation or Stevens
rearrangement.

rearrangement.

Only when the [2,3]-sigmatropic rearrangement cannot occur

competitively

does the Stevens rearrangement become important in reactions with

dithioketals. In these examples the catalytic methodol. for ylide

generation is advanced as an attractive alternative to base-promoted

generation is advanced as an attract methodologies. 72184-71-5P 87986-35-4P 87986-36-5P 87986-38-7P 87986-39-8P 87986-40-1P 89709-86-4P 89709-94-4P 89709-98-8P 89710-06-5P 89772-15-6P

RI: SPN (Synthetic preparation); PREP (Preparation)
(preps. of)
RN 72184-71-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(1,3-dioxolan-2-yl)-, ethyl ester, trans-

1.7 ANSWER 92 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (9CI) (CA INDEX NAME)

Relative stereochemistry.

87986-35-4 CAPLUS Cyclopropanecarboxylic acid, 2-(dimethoxymethyl)-, ethyl ester, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 87986-36-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(dimethoxymethyl)-, ethyl ester, (9CI) (CA INDEX NAME)

Relative stereochemistry.

87986-38-7 CAPLUS Cyclopropanecarboxylic acid, 2-(diethoxymethyl)-, ethyl ester, cis-(CA INDEX NAME)

87986-39-8 CAPLUS Cyclopropanecarboxylic acid, 2-(diethoxymethyl)-, ethyl ester, trans-(9CI) (CA INDEX NAME)

ANSWER 92 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

89710-06-5 CAPLUS Cyclopropanecarboxylic acid, 2-(dimethoxymethyl)-3-phenyl-, ethyl (1.alpha.,2.beta.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

89772-15-6 CAPLUS Cyclopropanecarboxylic acid, 2-(dimethoxymethyl)-3-phenyl-, ethyl (1.alpha., 2.alpha., 3.beta.) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 92 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

Cyclopropaneczkylic acid, 2-(1,3-dioxolan-2-yl)-, ethyl ester, cis-(9C1) (CA INDEX NAME)

Relative stereochemistry.

89709-86-4 CAPLUS Cyclopropanecarboxylic acid, 2-(dimethoxymethyl)- (9CI) (CA INDEX

RN 89709-94-4 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-(dimethoxymethyl)-, dimethyl ester (9CI) (CA INDEX NAME)

89709-98-8 CAPLUS 1,1-Cyclopropanedicarboxylic acid, 2-(diethoxymethyl)-, dimethyl ester (SCT) (CA INDEX NAME)

L7 ANSWER 93 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:64048 CAPLUS
DOCUMENT NUMBER: 100:64048
TITLE: Stereochemistry of the enzymatic ring opening of 1-aminocyclopropanecarboxylic acid
Hill, Richard K.; Prakash, Shimoga R.;

Rolf; Angst, Werner; Martinoni, Bruno; Arigoni, Duilio: Liu, Hung Wen; Walsh, Christopher T. Dep. Chem., Univ. Georgia, Athens, GA, 30602, USA J. Am. Chem. Soc. (1984), 106(3), 795-6 CODEN: JACSAT; ISSN: 0002-7863)

CORPORATE SOURCE:

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Stereospecifically labeled samples of 1-aminocyclopropanecarboxylic

acid

(ACPC), a key intermediate in ethylene biosynthesis, were prepd. to examine the stereochem. of ring opening to .alpha.-ketobutyrate catalyzed

by ACPC deaminase. The enantiomers of 2,2-dichloro-1phenyleyclopropanecarboxylic acid were sep. converted to (R)- and
(S)-[2,2-2H2]ACPC in a 5-step sequence, and an independent synthesis of

the R antipode was realized in 12 steps beginning with Sharpless asym. epoxidn. of 3-hydroymethyl-3-butenyl acetate. Upon enzymic

epoxidn. of 3-hydroymethyl-3-butenyl acetate. Upon enzymic deamination, (S)-[2,2-2H2]ACPC led to .alpha.-ketobutyrate labeled exclusively in

Me group, whereas the R enantiomer afforded product labeled only in

methylene group. These results demonstrated that ACFC deaminase specifically cleaves the C-C bond to the pro-S methylene group. 88454-65-3P 88454-78-8P RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation) (prepn. and Curtius rearrangement of) 88454-65-3 CAPLUS Cyclopropane-2,2-d2-carboxylic acid, 1-phenyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

88454-78-8 CAPLUS
Cyclopropane-2,2-d2-carboxylic acid, 1-[[[(1,1-dimethyl+dimethyl-dimethyl-, (R)-(9CI) (CA INDEX NAME)

L7 ANSWER 93 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ΙT

88454-63-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conversion to aldehyde of)
88454-63-1 CAPLUS
Cyclopropanecarboxylic acid, 2-chloro-1-phenyl-, methyl ester,
c(m) CN Cyclopropens (1R-cis)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\text{Cl}^{\text{S} \overset{\text{Ph}}{\underset{\text{R}}{\longrightarrow}} \text{OMe}}$$

88454-61-9
RL: RCT (Reactant)
(redn. of)
88454-61-9 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-1-phenyl-, (R)- (9CI) (CA

Absolute stereochemistry.

ANSWER 94 OF 139 CAPLUS COPYRIGHT 2002 ACS

939-90-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

946-38-3 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 946-39-4 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 3999-55-1 CAPLUS CN 1,2-Cyclopropanedicarboxylic acid, diethyl ester, (1R,2R)-rel- (9CI) INDEX NAME)

Relative stereochemistry.

L7 ANSWER 94 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1993:504822 CAPLUS 99:104822 Palladium/IV Palladium(II) acetate, an efficient catalyst for cyclopropanation reactions with ethyl

diazoacetate AUTHOR(S): Joseph Majchrzak, Michal W.; Kotelko, Antoni; Lambert,

p.
Inst. Drug Res., Med. Acad., Lodz, 90 145, Pol.
Synthesis (1983), (6), 469-70
CODEN: SYNTEF; ISSN: 0039-7881
Journal CORPORATE SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI English CASREACT 99:104822

AB Mixts. of cyclopropane isomers I and II (R = Ph, CO2Me, Ac, CO2Et; Rl = H,

Me) were obtained by the Pd(OAc)2-catalyzed reaction of N2CHCO2Et with RCR1:CH2. Thus, N2CHCO2Et in C6H6 was slowly added to PhCH:CH2 and Pd(OAc)2 in C6H6 at 40.degree. to give a 2:1 mixt. of II (R = Ph, R1

and I (R = Ph, R1 = H).
697-49-4P 710-43-0P 939-90-2P
946-38-3P 946-39-4P 3999-55-1P
13949-95-6P 13950-03-3P 13950-15-7P
13950-18-0P 33769-98-1P 33769-99-2P
RL: SPN (Synthetic preparation) PREP (Preparation)
(prepn. of)
697-49-4 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1-methyl-, trans- (8CI, 9CI) (CA

RN CN INDEX NAME)

Relative stereochemistry.

710-43-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, diethyl ester, {IR,2S}-rel- {9CI} INDEX NAME)

Relative stereochemistry.

L7 ANSWER 94 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

13949-95-6 CAPLUS Cyclopropanecarboxylic acid, 2-acetyl-, ethyl ester, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry

13950-03-3 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, 2-ethyl 1-methyl ester, trans- (9C1) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c|c} \text{MeO} & \\ \hline & \\ \hline & \\ \hline & \\ \hline \end{array}$$

RN CN (9CI) 13950-15-7 CAPLUS Cyclopropanecarboxylic acid, 2-acetyl-, ethyl ester, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 13950-18-0 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid, 1-methyl-, 2-ethyl 1-methyl ester, (9CI) (CA INDEX NAME)

ANSWER 94 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

33769-98-1 CAPLUS 1,2-Cyclopropanedicarboxylic acid, ethyl methyl ester, cis- (8CI, (CA INDEX NAME)

Relative stereochemistry.

33769-99-2 CAPLUS
1,2-Cyclopropanedicarboxylic acid, ethyl methyl ester, trans- (8CI, (CA INDEX NAME)

Relative stereochemistry.

ANSWER 95 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (prepn. of) 67375-30-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (15,38)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 95 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1983:178808 CAPLUS
MENT NUMBER: 98:178808 ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
INVENTOR(S):
PATENT ASSIGNEE(S):

98:178808 Cyanobenzyl cyclopropane carboxylates Wood, Derek Alexander Shell Internationale Research Maatschappij B. V.,

Neth. Eur. Pat. Appl., 19 pp. CODEN: EPXXDW SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English 1

PATENT :	NO.	KIND	DATE		APF	LICATION NO.	DATE
EP 6746	1	A1	19821222		EP	1982-200551	19820506
EP 6746	1	B1	19850717				
R:	BE, CH, D	E, FR,	GB, IT,	LI, N	L		
CA 1162	561	A1	19840221		CA	1982-401877	19820428
US 4409	150	Α	19831011		US	1982-375998	19820507
DK 8202	337	Α	19821127		DK	1982-2337	19820524
DK 1568	28	В	19891009				
DK 1568	28	С	19900219				
JP 5720	0347	A2	19821208		JP	1982-86706	19820524
ZA 8203	581	A	19830330		ZA	1982-3581	19820524
BR 8203	010	A	19830510		BR	1982-3010	19820524
IN 1589	71	A	19870228		IN	1982-DE394	19820524
PRIORITY APP GI	LN. INFO.:			GB	198	1-16033	19810526

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

Esters I (R and R1 independently are H, halo; R2 and R3 independently

Cl, Br, Me), useful as insecticides and pesticides (no data), were

C1, Br, Me), useful as insecticides and pesticides (no data), were prepd.

from the resp. acids, .alpha.-cyanobenzyl benzenesulfonates, and catalysts (quaternary ammonium salts, macrocyclic polyethers).

cis-3-(2,2-Bichlorovinyl)-2,2-dimethylcyclopropanecarboxylic acid was treated with 3-PhoCGHACH(MO) 03SCGHM44-4, BuMN+ Br-, and K2C03 at 70. degree. to give I (R = Rl = H, R2 = R3 = Cl).

R1: RCT (Reactant) (esterification of, by .alpha.-cyanobenzyl tosylate deriv., catalysts for)

RN: 55701-06-9 CAPLUS

IT 67375-30-89

R1: SRY (Synthetic preparation), PREP (Preparation)

RL: SPN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 96 OF 139 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1983:126416 CAPLUS

98:126416 CAPLUS

198:126416 CAPLUS

198:126416 CAPLUS

98:126416 CAPLUS

98:126416 CAPLUS

198:126416 CAPLUS

198:126416

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	TENT	NO.		KIN	ID.	DA7	ſΕ			API	PLICAT	ION NO.	DATE	2
					-									
EF	6188	0		A1	l	198	921	006		EP	1982-	301469	1982	20322
EF	6188	0		В1	l	198	350	619						
	R:	CH,	DE,	FR,	GB,	17	, 1	NL						
JE	5716	3341		A2	2	198	321	007		JP	1981-	47818	1981	10330
JI	6305	1136		B		198	881	013						
US	4485	257		A		198	341	127				359320	1982	20318
ORIT	Y APP	LN.	INFO.	:					JI	198	31-478	18	1981	10330
ER S	OURCE	(S):			CAS	REA	ACT	98	:12641	6				

AB Racemic cyclopropanecarboxylic acids I (R, R1 = H, C1-4 alkyl; RR1 = (CH2)n, n = 3-5] or their anhydrides were prepd. by racemizing the corresponding optically active, particularly levorotatory, cyclopropanecarboxylic acid anhydrides with a Lewis acid, optionally hydrolyzing the racemized anhydrides. Thus, stirring 15.0 g (-)-trans-I (R = R1 = Me) anhydride, 35 g toluene, and 1.02 g iodine at 70.degree. 60 min. and then hydrolyzing the racemized anhydride with 20% aq. NaOH at 80.degree. for 3 h gave 12.75 g (+--)-trans-I (R = R1 = Me). IT 2259-14-5 RL: RCT (Reactant)

RL: RCT (Reactant) (condensation of, with cyclopropanecarboxylic acid chloride deriv.

in

prepn. of acid anhydride) 2259-14-5 CAPLUS

2c39-14-5 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,38)- (9C1) (CA INDEX NAME)

ANSWER 96 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ΙŤ

705-16-8P 2935-23-1P RL: FORM (Formation, nonpreparative); PREP (Preparation) (formation of, by racemization of isomer mixts.) 705-16-8 CAPLUS

705-16-8 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (IR,3R)-rel- (9CI) (CA INDEX NAME)

## Relative stereochemistry.

2955-25-1 CARDS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(1R,3S)-rel- (9CI) (CA INDEX NAME)

## Relative stereochemistry.

85081-19-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and racemization of)
85081-19-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl), anhydride, [IS-[1.alpha.(lR\*,3R\*),3.beta.]]- (SCI) (CA INDEX NAME)

IT 10453-89-1

RL: RCT (Reactant) (racemization of isomer mixts.) 10453-89-1 CAPLUS

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1983:107599 CAPLUS
DOCUMENT NUMBER: 98:107599
TITLE: Light-induced reactions. XVI. Syntheses of natural

substances with light. III. Asymmetric total

synthesis of 19-norsteroids via a photochemical key

reaction: enantiomerically pure target compounds Quinkert, Gerhard; Schwartz, Ulrich; Stark,

AUTHOR(S): Herbert;

Weber, Wolf Dietrich: Adam, Friedhelm: Baier, Helmuta

Frank, Gudrun; Duerner, Gerd Inst. Org. Chem., Univ. Frankfurt/Main, Frankfurt/Main, D-6000, Fed. Rep. Ger. Liebigs Ann. Chem. (1982), (11), 1999-2040 CODEN: LACHDL; ISSN: 0170-2041 Journal German CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: LANGUAGE:

AB Enantiomerically pure estrone, 19-norandrost-4-ene-3,17-dione, 17.beta.-estradiol, and 19-nortestosterone were prepd. by total

syntheses via A-D ring condensations to give secosteroid AD moieties and

Subsequent cyclization. The vinylcyclopentanone I was a key intermediate, which underwent photochem. cyclization via an unstable o-quinodimethane to

estratrienones II. The chiral cyclopropanedicarboxylate III was an intermediate in the prepn. of I and was obtained with 95% optical  $\,$ 

purity
 from (-)-8-phenylmethal malonate by successive cyclocondensation with
BECH2CH:CHCHZBr, sapon., and esterification with CHZN2.
IT 83587-15-99

L7 CN (9CI) ANSWER 96 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-(CA INDEX NAME)

38259-73-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cyclocondensation, with di-Me methylmalonate)
38259-73-3 CAPUS

1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, dimethyl ester, (2R)-CN (9CI)

(CA INDEX NAME)

Absolute stereochemistry

84646-70-82

84646-70-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and neutralization of)
84646-70-8 CAPLUS
Strychnidin-10-one, 2,3-dimethoxy-, compd. with (R)-dimethyl
2-ethenyl-1,1-cyclopropanedicarboxylate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 38259-73-3 CMF C9 H12 O4

ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) CDES 1:R

Absolute stereochemistry.

СМ

Absolute stereochemistry.

| T | S3376-53-7P | RL: SFN (Synthetic preparation); PREP (Preparation) (prepn. and resoln. of) | S3376-53-7 CAPLUS | S3587-53-9 CAPLUS | S3587-55-99 84646-69-59 84658-44-6P 84680-67-1P 84680-68-2P 84710-59-8P | RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation) (prepn. and sapon. of) | RN 83587-15-9 CAPLUS | CAPLUS |

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 84646-69-5 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-,
bis[[1R,25,5R]-5-methyl-2[1-methylethyl)cyclohexyl] ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 84658-44-6 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, bis(1,7,7-trimethylbicyclo[2,2:]hept-2-yl) ester,
[IS-[1.alpha.,2.beta.[1(IR\*,2S\*,4
R\*),2S\*],4.alpha.]]- (SCI) (CA INDEX NAME)

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 84680-67-1 CAPIUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-,
bis[5-methyl-2-(1-methyl-1phenylethyl)cyclohexyl] ester,
[15-[1.alpha.[A\*(1R\*,2S\*,5R\*)],2.beta.,5.al
pha.]]- (9CI) (CA INDEX NAME)

RN 84680-68-2 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, bis[5-methyl-2-(1-methylethyl) cyclohexyl] ester,
[18-[1.alpha,[R\*(IR\*,28\*,5x\*)],2.beta.,5.al
pha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 84710-59-8 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, bis(1,7,7-trimethylbicyclo[2,2.1]hept-2-yl) ester,
[1R-[1.a]pha.,2.beta.[1(1R\*,25\*,4
R\*),25\*],4.a]pha.]]- (SCI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

53376-55-9P
RL: SPN (Synthetic preparation), PREP (Preparation)
(preph. of)
53376-55-9 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, dimethyl ester, (S)-

RN 533. CN 1,1-Cyclop... (9CI) (CA INDEX NAME) Absolute stereochemistry. L7 ANSWER 97 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 98 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

7381-97-7 CAPLUS Cyclopropanecarboxylic acid, 2,3-diphenyl-, methyl ester, (1.alpha.,2.beta.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

77060-83-4 CAPLUS
Cyclopropanecarboxylic acid, 2-formyl-2,3-diphenyl-, methyl ester,
(1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 84429-11-8 CAPLUS
CN 1,1-Cycloprepanedicarboxylic acid, 2,3-diphenyl-, dimethyl ester, cis-

(9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 98 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1983:71124 CAPLUS
DOCUMENT NUMBER: 99:71124
TITLE: 88dical hydroformylation and hydrogenation of cyclopropenes with Hco(CO)4 and HMn(CO)5
AUTHOR(S): Nalesnik, Theodore E./ Freudenberger, John H./ Orchin,

Milton Dep. Chem., Univ. Cincinnati, Cincinnati, OH, CORPORATE SOURCE: 45221,

SOURCE: J. Organomet. Chem. (1982), 236(1), 95-100
CODEN: JORCAI, ISSN: 0022-328X

DOCUMENT TYPE: Journal
LANGUAGE: English
CTHER SOURCE(S): CASREACT 98:71124
AB The reactions of HCo(CO)4 or HMn(CO)5 with substituted cyclopropenes
are

consistent with the formation of intermediate caged radical pairs; recombination in the cage of the radical pair leads to hydroformylation, and cage escape leads to hydrogenation. Steric factors are important

in

detg. rates and the product stereochem.

5861-32-5P 7180-39-4P 7381-97-7P

77050-83-4P 84429-11-8P 84429-12-5P

84429-13-0P 84472-89-12

RL: SFN (Synthetic preparation), PREP (Preparation) (prepn. of)

5861-32-5 CAPLUS

Cyclopropanecarboxylic acid, 2,3-diphenyl-, methyl ester, (1.alpha.,2.beta.,3.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

7180-39-4 CAPLUS
Cyclopropanecarboxylic acid, 2,3-dipropyl-, methyl ester, (1.alpha.,2.beta.,3.beta.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 98 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

84429-12-9 CAPLUS Cyclopropanecarboxylic acid, 2-formyl-2,3-dipropyl-, methyl ester, (1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

84429-13-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,3-dipropyl-, 2-methyl ester, {1.alpha.,2.alpha.,3.beta.}- (9CI) (CA INDEX NAME)

84472-49-1 CAPLUS Cyclopropanecarboxylic acid, 2-formyl-2,3-diphenyl-, methyl ester, (l.alpha,2.beta.,3.beta.)- (SCI) (CA INDEX NAME)

L7 ANSWER 99 OF 139 CAPLUS COPYRIGHT 2002 ACS

RN 82509-91-9 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-, [1.alpha.,3.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

ΙT

82473-48-1P RL: SFN (Synthetic preparation); PREP (Preparation) (prepn. of) 82473-48-1 CAPUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1,2,2-trichloro-2-phenylethyl)-(CA INDEX NAME)

66477-00-7P ΙT

IT 66477-00-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as parasiticide)

RN 66477-00-7 CAPLUS

CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

ANSWER 99 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1982:563291 CAPLUS
HENT NUMBER: 97:163291
E: Substituted trans-3-(2-E-phenylalken-1-y1)-2,2dimethylcyclopropaneoarboxylic acid
.alpha.-cyano-3-phenoxybenzyl ester, L7 ANSWER 99 OF ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

intermediates for their production and their use as

ectoparasiticides INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: Fuchs, Rainer, Stendel, Wilhelm Bayer A.-G., Fed. Rep. Ger. Ger. Offen., 27 pp. CODEN: GWXEX Patent German 1

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A1 19820701 DE 3044799 DE 1980-3044799 19801128

.CO2CH(CN)

Title cyclopropanecarboxylates (I; R = H, halo, CN, NO2, alkyl, AB Title cyclopropanecarboxyrauto (27 alkoxy, alkylamino, haloalkyl, etc.; R1 = H, halo, Me, MeO; R2 = H, halo, alkylamino, haloalkyl, etc.; R1 = H, halo, Me, MeO; R2 = H, halo, Me, MeO; R3 = H, halo, MeO; R3 = H, halo

alkylamino, haloalkyl, etc.; RI = H, naio, ne, neo, neo ...
haloalkyl), useful as ectoparasiticides (no data), were prepd. by
treating
the appropriate cyclopropanecarbonyl chloride with 3-PhOCSH4CHO and an
alkali metal cyanide in a solvent, optionally in the presence of a
catalyst. Thus, 3.46 g 3-PhOCSH4CHO and 4.7 g
(.+-.)-trans-(E)-3-(2-chloro-2-phenylvinyl)-2,2dimethylcyclopropanecarbonyl chloride stirred 4 h at 20-25.degree.
with

1.4 g NaCN and 0.2 g Bu4N+.Br- in 80 mL cyclohexane and 2 mL H2O gave 84%

ANSWER 99 OF 139 CAPLUS COPYRIGHT 2002 ACS

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1982:552601 CAPLUS MENT NUMBER: 97:162601 ACCESSION NUMBER: DOCUMENT NUMBER:

Insecticidal (1,1'-biphenyl)-3-ylmethyl esters,

use and compositions containing them Plummer, Ernest L. FMC Corp., USA Eur. Pat. Appl., 68 pp. CODEN: EPXXDW INVENTOR(S): PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: Patent English 5 LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	TENT	NO.		KII	4D	DATE			AP	PLIC	ATIC	N NO	. 1	DATE	
EP	4997	7		A:	l	1982	0421		EP	198	1-30	14543		19811	1001
EP	4997	7		В	1	1986	0226								
	R:	BE.	CH.	DE.	FR.	GB.	IT.	LU.	NL						
US										198	0-19	3056		19801	1002
												5940		19810	521
												4933		1981	
	1431														
-								T.T.	LU,	NT.					
EP											4-10	4934		19811	1001
	1431								131	150	4 10	,,,,,,,		1501.	
151									LU,	MIT					
RIORIT	Y APP	LN.	INFO	. :								66		19801	
								1	JS 19	81-2	6594	10		19810	0521
								1	TC 10	78-9	6640	15		19781	1204
												5			
								1	EP 19	81-3	0454	13		19811	1001
1T															

$$\mathsf{RCO}_2\mathsf{CH}_2 \longrightarrow \mathsf{R}_n^1$$

AB 1,1'-Biphenyl-3-ylmethyl 2,2-dimethylcyclopropanecarboxylates I (R substituted cyclopropyl; n, m = 0-4; Rl = halo, haloalkyl, Cl-6 alkyl, R2 = halo, haloalkyl, Cl-6 alkyl, Cl-6 alkoxy) (.apprx.80 compds.) were prepd. by std. methods and were useful as insecticides (data given). Thus, converting 2,4-difluoro-3-methylaniline to an amide and treating

treating with nitrosylhydrogen sulfate gave the corresponding nitrosoamide which decompd. in C6H6 to give 2,4-difluoro-3-methyl-1,1'-biphenyl. The

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

76350-87-3 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-methyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

76350-91-9 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry

76350-92-0 CAPLUS

Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, (4-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
was photochem. brominated with NBS to give
3-bromomethyl-2,4-difluoro-1,1'biphenyl (II). Esterifying Na cis-3-(2,2-dichloroethenyl)-2,2dimethylcyclopropanecarboxylate with II and
1,4-diazabicyclo[2,2 2]cotane
in aq. MeCN give I (R =
3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropyl,
R1 = 2-F, R2 = 4-F).
IT 59042-49-8P
RL: PREP (Preparation)
(Formation of sodium salt and esterification with
bromomethyldifluorobiphenyl)
RN 59042-49-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl

59042-49-8 CAPLUS (CYCLopropage and CAPLUS (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

76350-86-2P 76350-87-3P 76350-91-9P 76350-92-0P 76350-93-1P 76350-94-2P 76350-95-3P 76350-99-1P 76350-97-5P 76350-96-8P 76350-96-8P 76351-00-3P 76351-01-4P 76351-02-5P 76351-03-6P 76351-10-4P 76351-02-5P 76351-03-6P 76351-04-PP 76351-05-8P 76351-03-92-P 76351-10-5P 76351-11-6P 76351-13-09-2P 76351-10-5P 76351-11-6P 76351-13-0P 76351-16-1P 76351-17-2P 76351-18-3P 76351-3P 783169-76-P 7831

ept
adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(prepn. and insecticidal activity of)
76350-86-2 CAPLUS

2 (2 3 dipherosthany) - 2 2-dimethyl-

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-methyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS

76350-93-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichlorcethenyl)-2,2-dimethyl-, (6-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

76350-94-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (6-fluoro[1,1'-biphenyl]-3-yl}methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

76350-95-3 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (4-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

RN 76350-96-4 CAPLUS CV cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2-dichloroethenyl)-2,2-dimethyl-, (2-dichloroethenyl)-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-97-5 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(6-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-98-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(6-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-02-5 CAPLUS

(CA (2,4-dichloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA (1NDEX

NAME)

Relative stereochemistry.

$$C12C \xrightarrow{\text{Me}} S \xrightarrow{C1} C1$$

RN 76351-03-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl(3'-methyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

$$\operatorname{cl}_2\operatorname{c}_R = \operatorname{He}_{\operatorname{R}}$$

RN 76351-04-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-methyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-05-8 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroetheny1}-2,2-dimethyl-, (2,3,4,5,5,6-pentafluoro[1,1'-biphenyl]-3-yl)methyl ester, trans-(9CI) (CA INDEX NAME)

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76350-99-7 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (4-bromo[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 76351-00-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(4-bromo[1,1'-biphenyl]-3-yl)methyl ester, trans-(9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-01-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4-dichloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

RN 76351-06-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-07-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-08-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

1.7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-09-2 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
{2'-fluoro[1,1'-biphenyl]-3-yl}methyl ester, trans- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-10-5 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl(3'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-11-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
[3'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-15-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-16-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
[3\*-(trifluoromethyl)[1,1\*-biphenyl]-3-yl]methyl ester, cis- (9CI)
(CA
INDEX NAME)

Relative stereochemistry.

RN 76351-17-2 CAPLUS CN Cyclopropanacarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-methoxy[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-12-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-13-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-14-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(2'-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-18-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-methoxy[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry

RN 76351-19-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2',4'-dichloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA
INDEX
NAME)

Relative stereochemistry.

RN 76351-20-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2',4'-dichloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA
INDEX
NAME)

RN 76351-21-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R,3R)-rel- (9CI) (CA
INDEX
NAME)

## Relative stereochemistry.

RN 76364-78-8 CAPLUS
CN cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(2',3',4',5',6'-pentafluoro[1,1'-biphenyl]-3-yl)methyl ester, cis(9C1)
(CA INDEX NAME)

# Relative stereochemistry.

RN 76364-79-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
[3'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]methyl ester, trans- (9C1)

INDEX NAME)

## Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 82617-55-8 CAPLUS

NN 8/61/-55-8 CAPLUS
NN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl(2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI)

INDEX NAME)

# Relative stereochemistry.

RN 82617-57-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-ethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

# Relative stereochemistry.

RN 82617-58-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

## Relative stereochemistry.

RN 82617-59-2 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9Cl) (CA INDEX

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 79081-38-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, [1,1'-biphenyl]-3ylmethyl ester (9CI) (CA INDEX NAME)

RN 82617-34-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4-dimethyl[1,1\*-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

## Relative stereochemistry.

RN 82617-54-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA
INDEX
NAME)

#### Relative stereochemistry.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry

RN 82617-60-5 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-bromo[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

## Relative stereochemistry.

RN 82617-61-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(cyclopentylidenemethyl)-2,2-dimethyl[1,1'-biphenyl]-3-ylmethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.

RN 82617-62-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(cyclopentylidenemethyl)-2,2-dimethyl-,
(2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R-trans)- (9CI) (CA
INDEX
NAME)

## Absolute stereochemistry.

RN 82617-63-8 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(cyclopentylidenemethyl)-2,2-dimethyl-,
(2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, (1R-trans)- (9CI)

INDEX NAME)
Absolute stereochemistry.

RN 82617-64-9 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(cyclopentylidenemethyl)-2,2-dimethyl-,
(2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, (lR-trans)(9C1)
(CA INDEX NAME)

Absolute stereochemistry.

RN 82617-65-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 82617-69-4 CAPLUS CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2-methyl[1,1'-biphenyl]-3-yl] methyl ester [9CI] (CA INDEX NAME)

RN 82617-70-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

RN 82617-71-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

RN 82617-72-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
(2-methyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

RN 82617-66-1 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(2,4-dimethyl[1,1'-biphenyl]-3-yl}methyl ester, trans- (9CI) (CA
INDEX
NAME)

Relative stereochemistry.

RN 82617-67-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-,
[1,1'-biphenyl]-3-ylmethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

$$\Pr_{\text{Ph}} \left( \begin{array}{c} \text{Me} & \text{Me} \\ \text{S} & \text{S} \\ \text{O} \end{array} \right) \right)$$

RN 82617-68-3 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-,
[1,1'-biphenyl]-3-ylmethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

L7 ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$\begin{array}{c|c} C1 & \text{Me} \\ \hline \\ Me & C-O-CH_2 \end{array} \begin{array}{c} \text{Me} \\ \hline \\ Ph \end{array}$$

RN 82617-73-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
(2,4-dimethyl[1,1"-biphenyl]-3-yl]methyl ester (9CI) (CA INDEX NAME)

RN 82617-77-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-,
[1,1'-biphenyl]-3-ylmethyl ester (9CI) (CA INDEX NAME)

RN 82617-78-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-,
(2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

ANSWER 100 OF 139 CAPLUS COFYRIGHT 2002 ACS (Continued) 83169-68-0 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dibromoethenyl}-2,2-dimethyl-, {2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl}methyl ester, trans- (9CI)

INDEX NAME)

Relative stereochemistry.

RN 83169-69-1 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester,

(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

RN 83169-70-4 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chlor-03,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, (2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, cis-

(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$\begin{array}{c|c} & & & \\ & & & \\ \hline F & & \\ \hline F & & & \\ \hline F & & \\ F & & \\ \hline F &$$

83169-74-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-,
(2,6-difluoro[1,1'-biphenyl]-3-yl)methyl ester, (2R-cis)- (9CI) (CA INDEX

NAME)

$$\begin{array}{c|c} & \text{Me} & \text{Me} & \text{F} \\ & \text{Ph} \\ \text{Br}_2\text{C} = \text{CH} & \text{ } \\ & \text{ } \end{array}$$

83169-75-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, (2R-cis)- (9CI)

INDEX NAME)

83169-76-0 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, [1,1'-biphenyl]-3-ylmethyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 100 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

83169-71-5 CAPLUS

83189-71-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA

INDEX NAME)

Relative stereochemistry.

$$\text{Cl}_2\text{C} \xrightarrow{\text{R}} \text{R} \xrightarrow{\text{F}} \text{Ph}$$

RN 83169-72-6 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(3-chloro-2,3,3-trifluoro-1-propenyl)-2,2dimethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, cis(SCI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

$$\begin{array}{c|c} & & & \\ & & & \\ \hline F & & \\ \hline F & & & \\ \hline F & & \\ F & & \\ \hline F &$$

RN 83169-73-7 CAPLUS CN Cyclopropanecarboxylic acid, 3-(3-chlor-0-2,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, (2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

ANSWER 100 OF 139 CAPLUS COFYRIGHT 2002 ACS (Continued) 83169-77-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, [1,1'-biphenyl]-3-ylmethyl ester, trans- (9CI) (CA INDEX NAME)

83213-18-7 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4,6-trifluoro[1,1'-biphenyl]-3-yl)methyl ester, (1R-cis)- (9CI)

INDEX NAME)

Absolute stereochemistry.

76350-74-8P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. and insecticidal properties of)
76350-74-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2,4-difluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

ANSWER 101 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1982:543960 CAPLUS MENT NUMBER: 97:143960 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

97:143960
Stereochemistry of the thermal isomerizations of (25,3R)-2-methoxymethyl-2,3-dideuterio-1-(dideuteriomethylene)cyclopropane
Baldwin, John E.; Chang, Glenn Bu Chung
Dep. Chem., Univ. Oregon, Eugene, OR, 97403, USA
Tetrahedron (1982), 38(6), 825-35
CODEN: TETRAB; ISSN: 0040-4020 AUTHOR (S):

CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: Journal

English CASREACT 97:143960 OTHER SOURCE(S):

AB The (2S,3R)-isomer of I was heated at 198.8.degree.; from mol fractions of the 8 isomers of the resulting 2,3.alpha..alpha.- and 2,3,3.alpha.-tetradeuterio-2-methoxymethyl-1-methylenecyclopropanes

consts. were derived for 7 distinct modes of isomerization.

consts. Were derived to: ' constant must be constant on the constant of the co

-CH2OMe
in I becomes anti:syn 4:1 C(.alpha.)-H in the 1,3-shift product.
35501-83-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation) (prepn. and methylation of)
35501-83-8 CAPLUS
Cyclopropanecarboxylic acid, 2-{hydroxymethyl}-, methyl ester,
(1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

52920-02-2F 58105-22-9F RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and redn. of) 52920-02-2 CAPLUS

ANSWER 101 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82992-89-0 CAPLUS
Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, methyl ester,
(1.alpha.,2.alpha.,3.beta.)- (9CI) (CA INDEX NAME)

82992-90-3 CAPLUS Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, [1S-(1.alpha.,2.beta.,3.alpha.)] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

83024-82-2 CAPLUS Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, methyl ester, [15-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

83024-83-3 CAPLUS Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, methyl ester, [1s-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

ANSWER 101 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2R)-rel-L7 CN (9CI) (CA INDEX NAME)

Relative stereochemistry.

Cyclopropanecarboxylic acid, 2-(methoxymethyl)-, methyl ester, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

82992-88-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and sapon. of)
82992-88-9 CAPLUS
Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, 5-methyl-2-(1-methylethyl) cyclohexyl ester (9CI) (CA INDEX NAME)

ΙT 16205-72-4P 82992-89-0P 82992-90-3P 83024-82-2P 83024-83-3P 83024-84-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
16205-72-4 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (15,25)- (9CI)

INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 101 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

83024-84-4 CAPLUS Cyclopropane-2,3-d2-carboxylic acid, 2-phenyl-, [1S-(1.alpha.,2.beta.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:491961 CAPLUS
DOCUMENT NUMBER: 97:91961
TITLE: Insecticidal (1,1'-biphenyl)-3-ylmethyl esters
INVENTOR(S): PATENT ASSIGNEE(S): FRC Corp., USA Plummer, Ernest L. FMC Corp., USA U.S., 18 pp. Cont.-in-part of U.S. Ser. No.

SOURCE: 76,636, abandoned. CODEN: USXXAM

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English

PAT	ENT NO.		KIND	DATE		API	LICATION NO.	DATE
US	4329518		A	19820511		US	1980-193056	19801002
US	4214004		A	19800722		US	1978-966405	19781204
EP	63374		A1	19821027		EP	1982-103273	19791109
ΕP	63374		B1	19840222				
	R: CH,	DE,	FR, GB	, LU, NL				
ΙL	67046		A1	19830731		IL	1979-67046	19791119
US	4402973		A	19830906		US	1981-265940	19810521
ZA	8106442		A	19821229		ZA	1981-6442	19810916
ΙL	63955		A1	19870331		IL	1981-63955	19810928
DK	8104352		A	19820403		DK	1981-4352	19811001
EP	49977		A1	19820421		EP	1981-304543	19811001
EP	49977		B1	19860226				
	R: BE.	CH.	DE, FR	. GB. IT.	LU,	NL		
JP	57091952		A2	19820608		JP	1981-154893	19811001
BR	8106334		A	19820622		BR	1981-6334	19811001
ES	505939		A1	19830101		ES	1981-505939	19811001
HU	30450		0	19840328		HU	1981-2840	19811001
HU	190370		В	19860828				
HU	31049		0	19840428		HU	1982-3105	19811001
ΕP	143152		A2	19850605		EP	1984-104933	19811001
ΕP	143152		A3	19850717				
	R: BE.	CH,	DE, FR	, GB, IT,	LI.	LU. 1	VL.	
EP	143153		A2	19850605			1984-104934	19811001
ΕP	143153		A3	19850717				
	R: BE,	CH,	DE, FR	, GB, IT,	LI,	LU, N	VL.	
ΑU	8175990		A1	19820408		AU	1981-75990	19811002
ΑU	549629		B2	19860206				
DD	202098		A5	19830831		DD	1981-233846	19811002
CA	1171874		A2	19840731		CA	1982-407132	19820712
DK	8203442		Α	19820802		DK	1982-3442	19820802
ES	515039		A1	19830601		ES	1982-515039	19820816
ES	515040		A1	19830601		ES	1982-515040	19820816
ES	515041		A1	19830601		ES	1982-515041	19820816
ES	515042		A1	19830601		ES	1982-515042	19820816
ES	515043		A1	19830601		ES	1982-515043	19820816
ES	515044		A1	19830601		ES	1982-515044	19820816
US	4536591		A	19850820		US	1983-464242	19830207
US	4668792		A	19870526		US	1983-563711	19831220
(TI	APPLN.	INFO	.:			US 19"	78-966405	19781204
						US 197	79-76636	19790918

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS 76351-12-TP 76351-13-0P 76351-14-0P 76351-15-0P 76351-15-0P 76351-15-0P 76351-15-0P 76351-15-0P 76351-15-0P 76351-12-0P 76351-20-PP 76351-20-PP 76351-21-0P 76351-21-0P 76351-30-0P 20061-30-0P 20061-30-0

PF

RL: AGR (Agricultural use); BAC (Biological activity or effector,

pt
adverse); SFN (Synthetic preparation); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(prepn. and insecticidal activity of)
76350-74-8 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
{2,4-difluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX
NAME)

## Relative stereochemistry.

76350-86-2 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(2'-methyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

## Relative stereochemistry.

76350-87-3 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-methyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
EP 1980-900040 19791109
IL 1979-58744 19791119
US 1980-193056 19801002
US 1981-265940 1981052
CA 1981-366098 19810917
DK 1981-4352 19811001
EP 1981-304543 19811001
US 1982-376442 19820510
HER SOURCE(S): CASREACT 97:91961

[1,1'-Biphenyl]-3-ylmethyl derivs. I (R = OH, MeSO3, 4-MeC6H4SO3, Cl,

[1,17-Biphenyi]-3-yimethyi deriva. I (R = GH, Mesos), 4-Hechasos), Cl. R1 = H, 1-4 halo, esp. F, alkyl, F3C; R2 = H, 1-5 halo, esp. F, alkyl, F3C, alkoxy) were prepd. by several methods. Thus, stirring 2,4,3-F2(Me)CGHZNHZ with AcCl gave 2,4,3-F2(Me)CGHZNHAC which was converted to the nitrosoacetanilide and decompd. in C6H6 to give 2,4,3-F2(Me)CGHZPh which was treated with NBS to give I (R = Br, R1 = 2,4,3-F2Me, R2 = H). I were converted to pyrethroids, e.g. II, whose insecticidal and acaricidal activity was shown. 39042-49-8
RL: RCT (Reactant) (esterification of, with bromomethyldifluorobiphenyl) 59042-49-8 CAFUS (Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (IR,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

76350-74-8P 76350-86-2P 76350-87-3P 76350-81-9P 76350-92-0P 76350-93-1P 76350-93-1P 76350-93-1P 76350-93-1P 76350-93-1P 76350-93-1P 76351-03-97 76351-03-97 76351-03-97 76351-03-97 76351-03-97 76351-03-1P 76351-ΙT

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS

76350-91-9 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

76350-92-0 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, {4-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

76350-93-1 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (6-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

RN 76350-94-2 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(6-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-95-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-96-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-00-3 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-bromo[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-01-4 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4-dichloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 76351-02-5 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(2,4-dichloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76350-97-5 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(6-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76350-98-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(6-chloro[1,1'-biphenyl]-3-yl}methyl ester, trans- [9CI] (CA INDEX

Relative stereochemistry.

RN 76350-99-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4-bromo[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-03-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-methyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-04-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
{3'-methyl[1,1'-biphenyl]-3-yl)methyl ester, trans-(9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-05-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2',3',4',5',6'-pentafluoro[1,1'-biphenyl]-3-yl)methyl ester, trans(9CI)
(CA INDEX NAME)

RN 76351-06-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl2'-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-07-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-chloro[1,1'-biphenyl)-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-08-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-12-7 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(4'-fluoro[1,1'-biphenyl)-3-yl)methyl ester, cis- (9CI) (CA INDEX
NAMR)

Relative stereochemistry.

RN 76351-13-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
{4'-fluoro[1,1'-biphenyl]-3-yl}methyl ester, trans- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-14-9 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl(2'-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76351-09-2 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-10-5 CAPLUS CM Cyclopropaneoarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, CM (1000cf),11-hiphenyl)-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

RN 76351-11-6 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(3'-fluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$c_{12}c$$

RN 76351-15-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
[2'-chloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

RN 76351-16-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
[3'-{trifluoromethyl}[1,1'-biphenyl]-3-yl}methyl ester, cis- (9CI)

INDEX NAME)

Relative stereochemistry.

RN 76351-17-2 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-methoxy[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

76351-18-3 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2'-methoxy[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX

#### Relative stereochemistry.

76351-19-4 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2',4'-dichloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

#### NAME)

#### Relative stereochemistry.

76351-20-7 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2',4'-dichloro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA

## NAME)

#### Relative stereochemistry.

## ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

79081-38-2 CAPLUS

/9081-38-2 CAPLOS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, [1,1'-biphenyl]-3ylmethyl ester (9CI) (CA INDEX NAME)

$$\stackrel{\text{Me}}{\underbrace{\hspace{1.5cm}}}\stackrel{\text{Me}}{\underbrace{\hspace{1.5cm}}}\stackrel{\text{Me}}{\underbrace{\hspace{1.5cm}}}\stackrel{\text{Ph}}{\underbrace{\hspace{1.5cm}}}$$

79081-40-6 CAPLUS Cyclopropanezshoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, [1,1'-biphenyl]-3-ylmethyl ester (9CI) (CA INDEX NAME)

82617-34-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

# Relative stereochemistry.

82617-54-7 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,
(2,4-dimethyl{1,1'-biphenyl}-3-yl)methyl ester, trans- {9CI} (CA

#### ANSWER 102 OF 139 CAPIUS COPYRIGHT 2002 ACS (Continued)

76351-21-8 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

#### Relative stereochemistry.

76364-78-8 CAPLUS

76364-78-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2',3',4',5',6'-pentafluoro[1,1'-biphenyl]-3-yl)methyl ester, cis-(9CI)

## (CA INDEX NAME)

## Relative stereochemistry.

76364-79-9 CAPLUS

76364-79-9 CAPIUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, [3'-(trifluoromethyl)[1,1'-biphenyl}-3-yl]methyl ester, trans- (9CI)

## Relative stereochemistry.

# ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

## Relative stereochemistry.

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

# Relative stereochemistry.

82617-56-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI)

INDEX NAME)

# Relative stereochemistry.

82617-57-0 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-ethyl[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82617-58-1 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-, (2-chloro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

82617-59-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (2-fluoro[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX

Relative stereochemistry.

82617-60-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
(2-bromo[1,1'-biphenyl]-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropaneoarboxylic acid,
3. (cyclopentylidenemethyl)-2, 2-dimethyl-,
(2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester, (IR-trans)-(CA INDEX NAME)

Absolute stereochemistry.

82617-65-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (2,4-dimethyl{1,1'-biphenyl}-3-yl)methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

82617-66-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-{2-methyl-1-propenyl}-, (2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 82617-67-2 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-,
[1,1'-biphenyl]-3-ylmethyl ester, cis- (9CI) (CA INDEX NAME)

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82617-61-6 CAPLUS Cyclopropanecarboxylic acid, 3-(cyclopentylidenemethyl)-2,2-dimethyl-, [1,1'-biphenyl]-3-ylmethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82617-62-7 CAPLUS Cyclopropanecshoxylic acid, 3-(cyclopentylidenemethyl)-2,2-dimethyl-, (2-methyl[1,1"-biphenyl]-3-yl)methyl ester, (IR-trans)- (9CI) (CA

Absolute stereochemistry.

82617-63-8 CAPLUS Cyclopropanecarboxylic acid, 3-{cyclopentylidenemethyl}-2,2-dimethyl-, (2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester, (1R-trans)- (9CI) (CA RNDEX NAME)

Absolute stereochemistry.

82617-64-9 CAPLUS

L7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry. Double bond geometry unknown

RN 82617-68-3 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-phenylethenyl)-2,2-dimethyl-,
{1,1'-biphenyl}-3-ylmethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

82617-69-4 CAPLUS Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

82617-70-7 CAPLUS
Cyclopropanecatoxylic acid, 2,2,3,3-tetramethyl-, (2,4-dimethyl[1,1'-blphanyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 82617-71-8 CAPLUS Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

82617-72-9 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
(2-methyl[1,1"-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

82617-73-0 CAPLUS

82017-73-0 CAPLOS
Cyclopropanecarboxylic acid, 2,2-dichloro-3,3-dimethyl-,
{2,4-dimethyl[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX NAME)

82617-77-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-, [1,1'-biphenyl]-3-ylmethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1982:424013 CAPLUS DOCUMENT NUMBER: 97:24013

DOCUMENT NUMBER: TITLE:

97:24013
Asymmetric synthesis of permethric acid.
Stereochemistry of chiral copper carbenoid

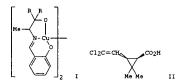
reaction AUTHOR(S):

Aratani, Tadatoshi, Yoneyoshi, Yukio; Nagase, Tsuneyuki Cent. Res. Lab., Sumitomo Chem. Co., Ltd.,

CORPORATE SOURCE: Osaka, 569,

Japan Tetrahedron Lett. (1982), 23(6), 685-8 CODEN: TELEAY, ISSN: 0040-4039 Journal English

DOCUMENT TYPE: LANGUAGE: GI



AB Olefins underwent stereoselective cyclopropanation by diazo compds. in the presence of R- or S-catalyst I (R = 2-octyloxy-5-tert-butylphenyl); this method was used for the enantioselective prepn. of lR-cis-permethric acid (II). Thus, Eto2cCHN2 was added to Cl3CCH2CH1CMe2

in the presence of S-I at 30.degree. over 4.75 h to give a cyclopropane ester, which underwent sapon. and dehydrochlorination by refluxing in XCN/4ag, EtCH for 5 h to give 921 product, comprising 80.68 II.

IT 23020-18-0P 48126-51-8P 55701-05-8P 55701-09-8P 55701-09-8P 1697-60-4P 1697-60-4P 1697-61-8P 55701-09-2P 1697-60-4P 1697-61-8P 55701-09-8P 2095-82-PP 82095-83-8P 82095-82-PP 82095-83-8P 82095-83-9P 82095-83-9P 82095-83-9P 82095-93-0P 82055-93-0P 82055-

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
23020-18-0 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (15,2R)- (9CI) (CA INDEX

Absolute stereochemistry.

1.7 ANSWER 102 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82617-78-5 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-, (2,4,5,6-tetrafluoro[1,1'-biphenyl]-3-yl)methyl ester (9CI) (CA INDEX

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 48126-51-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

55701-05-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-

(CA INDEX NAME)

55701-09-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

71697-60-4 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-{1.alpha.(15\*,3R\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

71697-61-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1R\*,3S\*),2.beta.,5.alpha.]}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

71697-62-6 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1S\*,3S\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82095-82-7 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethyl)-2,2-dimethyl-, ester, (1R-cis) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82095-86-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2-bromoethyl)-2,2-dimethyl-, ethyl

ester, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82095-87-2 CAPLUS Cyclopropanecarboxylic acid, 3-{2-bromoethy1}-2,2-dimethy1-,5-methy1-2-(1-methy1ethy1)cyclohexyl ester, [1R-[1.alpha.(1R\*,3S\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82095-88-3 CAPLUS Cyclopropanecarboxylic acid, 2-hexyl-, cis-(+)- (9CI) (CA INDEX

Rotation (+). Absolute stereochemistry unknown.

1.7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82095-83-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethyl)-2,2-dimethyl-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1R\*,3S\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

RN 82095-84-9 CN Cyclopropanecarboxylic acc., ester, (1R-cis)- (9CI) (CA INDEX NAME) 82095-84-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2-chloroethyl)-2,2-dimethyl-, ethyl

82095-85-0 CAPLUS

82095-85-0 CAPUS Cyclopropanecarboxylic acid, 3-(2-chloroethyl)-2,2-dimethyl-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1R\*,3S\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 82095-89-4 CAPLUS

Cyclopropanecarboxylic acid, 2-hexyl-, cis-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

82095-90-7 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, cis-(+)- (9CI) (CA

Rotation (+). Absolute stereochemistry unknown.

RN 82095-91-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, cis-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

82095-92-9 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, trans-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

82095-93-0 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, trans-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

82165-94-4 CAPLUS

82165-94-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, 5-methyl-2-{1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1S\*,3R\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82165-95-5 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1R\*,3R\*),2.beta.,5.alpha.])- (9CI) (CA INDEX NAME)

82165-96-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R-[1.alpha.(1S\*,3S\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

23020-15-7 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (15,2S)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

53692-73-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl-, (1S)- (9CI) (CA INDEX

Absolute stereochemistry.

53692-74-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl-, (R)- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry. Rotation (-).

55667-40-8 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

55701-08-1 CAPLUS

ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

82165-97-7 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-3-methyl-, (1.alpha.,2.alpha.,3.beta.)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

82166-04-9 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-3-methyl-, (1.alpha.,2.alpha.,3.beta.)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

3471-10-1P 23020-15-7P 53692-73-2P 53692-74-3P 55667-40-8P 55701-08-1P 57991-29-4P 82165-93-3P 82165-98-8P 82165-99-9P 82165-00-5P 82166-01-6P 82165-02-7P 82166-03-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, by stereoselective cyclopropanation reaction) 3471-10-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (-).

ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 3-(2,2-dichlorosthenyl)-2,2-dimethyl-,(15,35)- (SCI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

57991-29-4 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,5-methyl-2-(1-methylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)

82165-93-3 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1R[1.alpha.(1R\*,3S\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 82165-98-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-hexyl-, (15-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82165-99-9 CAPLUS

ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Cyclopropanecarboxylic acid, 2-hexyl-, (1R-trans)- (9CI) (CA INDEX

Absolute stereochemistry.

82166-00-5 CAPLUS

Cyclopropanecarboxylic acid, 2,3-dipropyl-, [2S-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

82166-01-6 CAPLUS

Cyclopropanecarboxylic acid, 2,3-dipropyl-, [1S-(1.alpha.,2.alpha.,3.beta.)]- (9CI) (CA INDEX NAME)

82166-02-7 CAPLUS

62100-02-7 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methoxypheny1)-3-methyl-, (1.alpha.,2.beta.,3.alpha.)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

82166-03-8 CAPLUS Cyclopropanecarboxylic acid, 2-(4-methoxyphenyl)-3-methyl-, (1.alpha.,2.beta.,3.alpha.)-(-)- (9CI) (CA INDEX NAME)

L7 ANSWER 104 OF 139
ACCESSION NUMBER: 1982:199162 CAPLUS
DOCUMENT NUMBER: 96:199162
INVENTOR(S): PATENT ASSIGNEE(S): Commonwealth Scientific and Industrial Research Organization, Australia
EUR. Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent LANGUAGE: EIXCOMMON EIXCOM

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 44718	A2	19820127	EP 1981-303282	19810716
EP 44718	A3	19820331		
EP 44718	B1	19851113		
R: CH, DE,	FR, GB	, IT, NL		
US 4390715	A	19830628	US 1981-282190	19810710
AU 543390	B2	19850418	AU 1981-72828	19810713
AU 8172828	A1	19820121		
ZA 8104795	A	19820728	ZA 1981-4795	19810714
JP 57042658	A2	19820310	JP 1981-112892	19810717
PRIORITY APPLN. INFO.	:		AU 1980-4608	19800718

Esters I [R = halo, alkyl, alkoxy, alkylthio; R1 = H, Me; RR1 =

OCH20, OCF20, R2 and R3 (same or different) are H, F, Cl, Br, Mer R4 and R5

or different) are H, F] and II (R and Rl same as above) [R6, R7, R8, R9,

R10, and R11 (same or different) are H, F, Br, Cl, Me] were prepd. and

L7 ANSWER 103 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Rotation (-). Absolute stereochemistry unknown.

60066-84-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn., sapon., and dehydrochlorination of) 60066-84-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, ΙT

ethyl ester (9CI) (CA INDEX NAME)

ANSWER 104 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
(esterification of, by pentafluorobenzyl bromide, catalysts
for)
81733-73-5 CAPLUS
81733-72-4P
RL: AGR (Agricultural use); BAC (Biological activity or effector,

ot adverse): SPN (Synthetic preparation): BIOL (Biological study): FREP (Preparation): USES (Uses) (prepn. and insecticidal activity of) 81733-72-4 CAPIUS Cyclopropanecarboxylic acid, 1-(4-ethoxyphenyl)-2,2-difluoro-, (pentafluorophenyl)methyl ester (SCI) (CA INDEX NAME)

L7 ANSWER 105 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:461558 CAPLUS
DOCUMENT NUMBER: 95:61558
Asymmetric cyclopropanation of fumarates with methylene bromide catalyzed by cobalt or nickel

complexes Matsuda, Hideki; Kanai, Hiroyoshi AUTHOR(S): CORPORATE SOURCE: SOURCE:

Fac. Eng., Kyoto Univ., Kyoto, 606, Japan Chem. Lett. (1981), (3), 395-6 CODEN: CMLTAG; ISSN: 0366-7022

Journal English

DOCUMENT TYPE: LANGUAGE: GI

RO2C H

AB RR- And S5-trans-1,2-cyclopropanedicarboxylic acids (I; R = H) were prepd.

by cyclopropanation of trans-RO2CCH:CHCO2R [R = (-)-menthyl, (-)- and (+)-bornyl] with CH2Br2 over CoCl2 or NiBr2 with subsequent sapon.

RN 78349-07-2 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid,
bis(1,7,7-trinethylbroyclo[2,2.1]hept-2yl) ester, [lR-[1.alpha.,2.beta.[15\*,25\*(lR\*,25\*,5R\*)],5.alpha.]](9C1)

(CA INDEX NAME)

ANSWER 105 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 78392-60-6 CAPLUS
CN 1,2-Cyclopropanedicarboxylic acid,
bis(1,7,7-trimethylbicyclo[2.2.1]hept-2y1) ester, [15-[1.alpha.,2.beta.[1S\*,2S\*(1R\*,2S\*,4R\*)],4.alpha.]](SCI)

(CA INDEX NAME)

14590-54-6P 34202-45-4P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
14590-54-6 CAPLUS
1,2-Cyclopropanedicarboxylic acid, (15-trans) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

34202-45-4 CAPLUS 1,2-Cyclopropanedicarboxylic acid, (1R-trans)- (9CI) (CA INDEX NAME)

L7 ANSWER 106 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:442461 CAPLUS
DOCUMENT NUMBER: 95:42461
TITLE: Vinyleyclopropane derivatives
FAYERT ASSIGNEE(S): 524261
Emery Industries, Inc., USA
U.S., 13 pp.
CODEN: USXXXAM
DOCUMENT TYPE: 724261
FATER TYPE: 724261

CONTROL TYPE: 724261

CONTROL TYPE: 724261

CONTROL TYPE: 724261

CONTROL TOPYRIGHT 2002 ACS
PSTACH 2002 ACS
P

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATE	ENT INFORMATION:				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 4252739	A	19810224	US 1979-68135	19790820
	EP 25846	A1	19810401	EP 1980-104651	19800806
	EP 25846	B1	19840307		
	R: BE, CH,	DE. FR	, GB, NL		
	CA 1154789	A1	19831004	CA 1980-357951	19800811
	JP 56045425	A2	19810425	JP 1980-112757	19800818
	JP 01059253	B4	19891215		
	BR 8005243	A	19810304	BR 1980-5243	19800819
PRIC	RITY APPLN. INFO	. :		US 1979-68135	19790820
AB	The reaction of	RCR1R2	CR3: CR4CR5R6	R (R = halo, mesyl,	tosvl. brosvl.
				2, R3, R4, R5, and F	
alky	(1) with		- · · · · · · · · · · · · · · · · · · ·	-,,,,	
	activated methy	lene co	mnde wae cat	talacted by group VA	or VIA element

onium

ucompds. and gave vinylcyclopropanes. Thus, trans-ClCH2CH:CHCH2Cl was treated with CH2(CO2Et)2, Me(CH2)15P+Bu3 Br-, and XOH to give di-Et 2-vinylcyclopropane-1,1-dicarboxylate.
7686-78-4P 33626-79-8P 65590-89-8P

IT

78162-06-8P 78162-08-0P 78162-15-9P 78162-18-2P 78162-19-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 7686-78-4 CAPLUS

1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, diethyl ester (9CI)

INDEX NAME)

33626-79-8 CAPLUS Cyclopropanecarboxylic acid, 1-acetyl-2-ethenyl-, ethyl ester (9CI)

INDEX NAME)

ANSWER 106 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65590-89-8 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-ethenyl-, ethyl ester (9CI) INDEX NAME)

RN 78162-06-8 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, bis(1-methylethyl) ester (9CI) (CA INDEX NAME)

78162-08-0 CAPLUS
1,1-Cyclopropanedicarboxylic acid, 2-ethenyl-, dibutyl ester (9CI)

INDEX NAME)

78162-15-9 CAPLUS

Cyclopropanecarboxylic acid, 2-ethenyl-1-phenyl-, ethyl ester (9CI)

ANSWER 106 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) INDEX NAME)

RN CN NAME) 78162-18-2 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-ethenyl- (9CI) (CA INDEX

78162-19-3 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-ethenyl-, 4-chloro-2-butenyl ester (9CI) (CA INDEX NAME)

$$_{\rm H_2C=CH}$$
 CN  $_{\rm C-O-CH_2-CH=CH-CH_2C1}$ 

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

ANSWER 108 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSSION NUMBER: 1981:191780 CAPLUS
MENT NUMBER: 94:191780 CAPLUS
LE: 2-(2',2',2'-Trihaloethyl)-4-halocyclobutan-1-ones
BNTOR(S): Bellus, Daniel; Greuter, Hans; Martin, Pierre;
Steiner, Eqinhard
CMT ASSIGNEE(S): Ciba-Geigy Corp., USA
U.S., 15 pp. Cont.-in-part of U.S. Ser. No.
412. INVENTOR (S):

PATENT ASSIGNEE(S):

SOURCE: 891,412,

abandoned. CODEN: USXXAM Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4242278	A	19801230	US 1978-948126	19781003
CH 644342	A	19840731	CH 1978-1974	19780223
GB 1601553	A	19811028	GB 1978-31151	19780330
CH 637100	A	19830715	CH 1978-9992	19780925
IL 60782	A1	19840229	IL 1980-60782	19800807
US 4322374	A	19820330	US 1980-181015	19800825
PRIORITY APPLN. INFO	:		CH 1977-4071	19770331
			CH 1977-14404	19771124
			CH 1978-1974	19780223
			US 1978-891412	19780329
			CH 1978-9992	19780925
			GB 1978-12557	19780330
			IL 1978-54395	19780330
			US 1978-948126	19781003

GI

AB The title compds. I (X = Br, Cl; R1, R2 = H, Me, R1R2 = C2-4 alkylene; R3

lener R3

- Br, Cl), useful as intermediates to insecticidal
dihalovinylcyclopropanecarboxylic acids, were prepd. by
ocondensation
of RIR2C:CH2 with CX3CH2CHR3COC1. Thus, heating CC13CH2CHC1COC1 with
isobutene in cyclohexane contg. Et3N at 65.degree. 7 h gave 60% I

(R1 = R2 = Me; X = R3 = C1) (II). Treating II and similar I with eq. NaOH

gave

dihalovinylcyclopropanecarboxylic acid derivs.

IT 52315-07-8P 52645-53-1P 59042-49-8P
59042-50-1P 61262-60-2P 63538-10-3P
63597-73-9P 63710-57-6P 64628-80-4P
68697-20-1P

L7 ANSWER 107 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:208401 CAPLUS
DOCUMENT NUMBER: 94:208401
TITLE: 1910-robis(organonitrile)palladium(II) catalysis

of cis to trans isomerization of ethyl

chrysanthemate and

chrysanthemic acid Williams, Jimmie L.; Rettig, Michael F. Dep. Chem., Univ. California, Riverside, CA, AUTHOR(5): CORPORATE SOURCE: 92521,

SOURCE: USA
SOURCE: Tetrahedron Lett. (1981), 22(5), 385-8
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
AB R2PdCl2 (R = MeCN, EtCM, PhCN) in C6H6 or CHCl3 act as homogeneous catalysts in the room temp. cis-trans isomerization of Et chrysanthemate and chrysanthemic acid.

11259-78-6
RL: RCT (Reactant)
(cls-trans isomerization of, palladium complex-catalyzed)
RN 15259-78-6 CAPLUS
IT 827-90-7F 1802-02-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, by palladium complex-catalyzed isomerization of cis

(prepn. of, by palladium complex-catalyzed isomerization of cisinomer)
RN 827-90-7 CAPLUS
RN 1802-02-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl

ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

ANSWER 108 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
52315-07-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethylcyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

52645-53-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{Me} \\ \hline & \text{Cl}_2\text{C} = \text{CH} & \\ \hline \end{array}$$

Relative stereochemistry.

59042-49-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

\_\_\_\_CC12 HO2C

59042-50-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,38)-rel- (9C1) (CA INDEX NAME)

Relative stereochemistry.

61282-80-2 CAPLUS Cyclopropanecarboxylic acid, 2-{2,2-dichloroethenyl}-3-methyl- (9CI) (CA

INDEX NAME)

63538-10-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

63597-73-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

63710-57-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

64628-80-4 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-(3-phenoxyphenyl)ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 109 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:156367 CAPLUS
DOCUMENT NUMBER: 94:156367
Stereoselective synthesis of optically active dictyopterenes A and B and their geometrical

isomers AUTHOR(S):

Kajiwara, Tadahiko; Nakatomi, Toshihiro; Sasaki, Yasushi; Hatanaka, Akikazu Dep. Agric. Chem., Univ. Yamaguchi, Yamaguchi,

CORPORATE SOURCE: 753,

Japan Agric. Biol. Chem. (1980), 44(9), 2099-104 CODEN: ABCHA6; ISSN: 0002-1369

DOCUMENT TYPE: LANGUAGE: GI

H CH: CH2 I

AB Optically active dictyopterenes A (I, R = E-CH:CHBu) and B (I, R = E,Z-CH:CHGH:CHEL) and their geometrical isomers were stereoselectively prepd. by condensing acrolein with EtO2CCH2S+Me2.Br- or by Wittig reaction of (+)-I (R = CHO), derived from partially resolved (.+-.)-(1S,2R)-I (R =

CO2H), with phosphonium salts in liq-solid 2-phase systems using

ethers. IT 77210-35-6P

7/210-35-0F RE: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and detn. of the abs. configuration of)
7/210-35-6 CAPLUS
Cyclopropanecarboxylic acid, 2-ethenyl-, (15,2R)- (9CI) (CA INDEX

Absolute stereochemistry. Rotation (+).

IT //ILS-19-9-9-10 (Synthetic preparation); PREP (Preparation) (prepn. and oxidn. of) 77183-9-8 CAPLUS 77210-36-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

ANSWER 108 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

68697-20-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trichloroethyl)-, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 109 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (prepn. and redn. of) 77210-36-7 CAPLUS Cyclopropanecarboxylic acid, 2-ethenyl-, methyl ester, (1S-trans)-

(CA INDEX NAME)

Absolute stereochemistry.

77210-34-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and resoln. of)
77210-34-5 CAPLUS
77183-94-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and sapon. of)
77183-94-9 CAPLUS
38206-81-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
38206-81-4 CAPLUS
Cyclopropanecarboxylic acid, 2-ethenyl-, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

77183-91-6P 77183-92-7P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation) (prepn., redn., and Wittig reaction of)
77183-91-6 CAPUUS
77183-92-7 CAPUUS

L7 ANSWER 110 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1981:121308 CAPLUS DOCUMENT NUMBER: 94:121308 TITLE: Benzylwaralini

Benzylpyrrolylmethyl esters of cyclopropane carboxylic

INVENTOR(S): PATENT ASSIGNEE(S):

acids
Henrick, Clive A.
Zoecon Corp., USA
U.S., 5 pp. Cont.-in-part of U.S. Ser. No. SOURCE: 942,509.

CODEN: USXXAM DOCUMENT TYPE: Patent English 3 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE US 4229352 US 4198527 PRIORITY APPLN. INFO.: US 1979-66263 US 1978-942509 US 1978-942509 19790813 19780915 19780915

AB Pesticides (no data), benzylpyrrolylmethyl cyclopropanecarboxylates
I (R = H, F, Br, Cl, CF3, Me, MeO, MeS; Rl = lower alkyl, lower haloalkyl,

alkenyl, lower haloalkenyl, substituted phenyl; R2 = lower alkyl, halo; R3 = H, lower alkyl, halo; Z = O, S) were prepd. by the reaction of the

acid

chloride and alc. in an org. solvent over a basic catalyst or
the reaction of the acid and the benzyl halide deriv. in an org.
solvent
in the presence of a base. Thus, 3-(4-chlorophenoxy)-2,2dimethylcyclopropanecarboxylic acid was treated with SO2C12 and the
acid

chloride was treated with 3-benzylpyrrolylmethyl alc. in the

presence of 4-(dimethylamino)pyridine in C6H6 at 25.degree. for 18 h to give I (R = H, I = 4-ClC6H4, R2 = R3 = Me, Z = 0).

IT 71279-94-2

71279-94-2
RL: RCT (Reactant)
(acylation by, of benzylpyrrolylmethyl alc.)
71279-94-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(pentyloxy)- (9CI) (CA INDEX

ANSWER 110 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) [3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

76827-16-2 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trifluoroethoxy)[3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

76827-17-3 CAPLUS

76827-17-3 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(pentyloxy)-,
{3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

ANSWER 110 OF 139 CAPLUS COPYRIGHT 2002 ACS NAME;

5842-37-5
RL: RCT (Reactant)
(chlorination of)
5842-37-5 CAPLUS
Cyclopropanecarboxylic acid, 3-(4-chlorophenoxy)-2,2-dimethyl- (9CI)

76827-13-9P 76827-14-0P 76827-15-2P
76827-17-3P 76827-18-4P 76827-19-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepa. of)
76827-13-9 CAPIUS
Cyclopropanecarboxylic acid, 3-(4-chlorophenoxy)-2,2-dimethyl-,
[3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

76827-14-0 CAPLUS Cyclopropanecarboxylic acid, 3-(4-fluorophenoxy)-2,2-dimethyl-,

L7 ANSWER 110 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 76827-18-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propoxy-,
[3-(phenylmethyl)-1Hpyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

76827-19-5 CAPLUS

/OBE/-19-5 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(pentyloxy)-, [3-((4-fluorophenyl)methyl]-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX

(Continued)

TT 74407-80-0
RL: RCT (Reactant)
(reaction of, with benzylpyrrolylmethyl bromide)
RN 74407-80-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trifluoroethoxy)(9CI)

(CA INDEX NAME)

F3C-CH2-C

76694-87-6
RL: RCT (Reactant)
(reaction of, with benzylpyrrolylmethyl methanesulfonate)
76694-87-6 CAPLUS
Cyclopropanecarboxylic acid, 3-(4-fluorophenoxy)-2,2-dimethyl- (9CI)

(CA INDEX NAME)

L7 ANSWER 111 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:121128 CAPLUS
DOCUMENT NUMBER: 94:121128
CYANGNYDIN esters by reacting a carboxylic acid anhydride with an alkali metal cyanide and an

alkali

metal borohydride Photis, James M. Stauffer Chemical Co., USA U.S., 5 pp. CODEN: USXXAM Patent English 1 INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 4234508 A 19801118 US 1979-80957 19791001

AB The title process, using an aq. Bu4N+ Br- phase transfer-catalyzed procedure, was used to prep.. e.g.,

(R, 5) - alpha.-cyano-3-phenoxybenzyl

(cis,
trans)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate, a known insecticide, from the anhydride of 3-PhOC6H4CO2H with dichlorochrysanthemic acid.

IT 76925-90-1P

RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation)

76925-90-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction with borohydride and cyanide)
76925-90-1 CAPLUS
Benzoic acid, 3-phenoxy-, anhydride with 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylic acid (9CI) (CA INDEX NAME)

IT 52315-07-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
52315-07-8 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

55701-05-8 ΙT

L7 ANSWER 111 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
R1: RCT (Reactant)
(reaction of, with phenoxybenzoyl chloride)
RN 55701-05-8 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl(9C1)

(CA INDEX NAME)

L7 ANSWER 112 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1980:567825 CAPLUS 93:167825

DOCUMENT NUMBER: TITLE:

93:16/825 A new rapid esterification procedure utilizing exceptionally mild reaction conditions

AUTHOR (S):

Rao, C. Gundu Dep. Chem., Purdue Univ., West Lafayette, IN, CORPORATE SOURCE:

Org. Prep. Proced. Int. (1980), 12(3-4), 225-8 CODEN: OPPIAK, ISSN: 0030-4948 SOURCE:

DOCUMENT TYPE: LANGUAGE:

LANGUAGE: English
AB Stirring BzOH in MeCN with 1,5-diazabicyclo[5.4.0]undec-5-ene and
MeI 1 h

In at room temp. gave 97% BzCMe. Me and Et esters of hexanoic, cyclopropanecarboxylic, cyclohexanecarboxylic, anisic, mesitoic,

pivalic,
3-butenoic, and 4-(dimethylamino)benzoic acids were similarly prepd. in

ΙT

85-97% yields.
1759-53-1
RL: RCT (Reactant)
(esterification of, by Me iodide)
1759-53-1 (APUS)
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RI: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, by esterification in the presence of diazabicycloundecene) RN 2868-37-3 CAPLUS CN Cyclopropanecarboxylic acid, methyl ester (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 113 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) of a Cu catalyst gave I (R = H, Rl = CCl3), which was treated with Zn powder in ROAc-Et20 to give II (R2 = Cl). Analogous reaction of (R)-III gave (R)-IV which was cyclized in the presence of chiral binuclear

Cu catalyst to eventually give (lR,3R)-II (R2 = Cl).

TS 5567-40-9P STOI-02-SP 59213-08-0P
63597-73-9P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
RN 55667-40-8 CAPLUS
CN Cyclopropanacarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (lR,3R)- (9Cl) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

55701-02-5 CAPLUS Cyclopropanecarboxylic acid, 3-formyl-2,2-dimethyl-, methyl ester, (IR,35)- (9C1) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

59213-08-0 CAPLUS Cyclopropanaczhoxylic acid, 3-(2,2-dichlorcethenyl)-2,2-dimethyl-, 1-methylheptyl ester (9CI) (CA INDEX NAME)

Me- (CH2) 5-CH-0-

63597-73-9 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (lR,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 113 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:215260 CAPLUS
DOCUMENT NUMBER: 92:215260 Insecticide intermediates
INVENTOR(S): Hatch, Charles Eldrige; Kondo, Kiyoshi; Takashima,
TOSHIYUKİ; Tunenoto, Dalei
FOUNCE: PATENT ASSIGNEE(S): FMC Corp., USA
EUL. PATE. Appl., 45 pp.
COEN: EFXXDW
DOCUMENT TYPE: Patent

Patent English 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE		API	PLICATION NO.	DATE
EP 3666	A1	19790822		EP	1979-300173	19790202
EP 3666	B1					
		, GB, LU, NL				
US 4526987	Α	19850702		US	1979-736	19790103
CA 1258864	A1	19890829		CA	1979-320114	19790123
IL 56507	A1	19840131		IL	1979-56507	19790126
IL 66043	A1	19840131		I L	1979-66043	19790126
IL 66044	A1	19840131		IL	1979-66044	19790126
DK 7900474	A	19790807		DK	1979-474	19790205
HU 25874	0	19830829		HU	1979-FE1037	19790205
HU 182955	В	19840328				
JP 59030710	B4	19840728		JP	1979-11925	19790206
JP 54115315	A2	19790907				
JP 59172437	A2	19840929		JP	1983-132988	19830722
JP 62003137	B4	19870123				
ORITY APPLN. INFO	.:		US	19	78-875648	19780206
			US	19	78-875649	19780206
			US	19	79-736	19790103
			IL	19	79-56507	19790126

GI

Lactones I (R = H, alkoxycarbonyl; R1 = H, CBr3, CCl3; R = R1 .noteq.

H),
intermediates in the prepn. of insecticidal (no data)
cyclopropanecarboxylates II (R2 = Br, Cl), were prepd. Thus,
treatment at
Me2C:CHCH(OH)CCl3 (III) with diketene gave MeCOCH2CO2CH(CCl3) CH:CMe2,
which reacted with tosyl aride in MeCN and then with NaOH to give
N2CHCO2CH(CCl3)CH:CMe2 (IV). Carbenoid cyclization of IV in the

ANSWER 113 OF 139 CAPLUS COPYRIGHT 2002 ACS

ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1980:5888 CAPLUS MENT NUMBER: 92:5888 ACCESSION NUMBER:

DOCUMENT NUMBER:

Substituent effect in the ionization of

AUTHOR (S):

Substituent effect in the ionization of cis-2-substituted 1-cyclopropanecarboxylic acids Kusuyama, Yoshiaki Fac. Educ., Wakayama Univ., Wakayama, 640, Japan Bull. Chem. Soc. Jpn. (1979), 52(7), 1944-9 CODEN: BCSJA0; ISSN: 0009-2673 CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: LANGUAGE:

AB I (R = H, Me, Ph, MeO, EtO, Cl, Br, Ac, OAc, EtO2C) were prepd., and their pKa were detd. in water at 25.degree.C, along with those of II. The values for I are larger than those for II except for the chloro and bromo derivs. The substituent effects obtained were in the usual order in sense of the electronic effects, except for Ph, which produced a decrease
in acidity relative to the unsubstituted acid. 13C NMR chem. shifts the methylene gave an

LFER with the I pKa.

IT 5365-14-0 5365-17-3

RL: RCT (Reactant)
(esterification of, with methanol and sulfuric acid)

RN 5365-14-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dichloro- (6CI, 7CI, 8CI, 9CI) (CA INDEX the methylene C atom of the Et group in the Et ester of I in CDC13

5365-17-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dibromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

60212-40-0 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-, trans- (9CI) (CA INDEX NAME) Relative stereochemistry.

60212-41-1 CAPLUS Cyclopropanecarboxylic acid, 2-ethoxy-, trans- (9CI) (CA INDEX NAME) Relative stereochemistry.

60212-42-2 CAPLUS Cyclopropanecarboxylic acid, 2-methoxy-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

60212-43-3 CAPLUS Cyclopropanecarboxylic acid, 2-acetyl-, trans- (9CI) (CA INDEX NAME) Relative stereochemistry.

65475-70-9 CAPLUS Cyclopropanecarboxylic acid, 2-chloro-, trans- (9CI) (CA INDEX NAME)

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

939-90-2 6202-94-4 31420-66-3 52920-02-2 60212-40-0 60212-41-1 60212-42-2 60212-43-3 65475-70-9

SUZIZ-42-2 GUZIZ-43-3 SS4/3-70-9 RL: PRP (Properties) (PKs of, pKs of cls isomer vs.) 939-90-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

6202-94-4 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-, (1R,2R)-rel- (9C1) (CA INDEX NAME)

Relative stereochemistry.

1,2-Cyclopropanedicarboxylic acid, monoethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME) 31420-66-3 CAPLUS

Relative stereochemistry.

52920-02-2 CAPLUS 1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2R)-rel-(CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

71666-01-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and dehydrobromination of, by tributyltin hydride in

presence
of azobisisobutylnitrile)
RN 71666-01-8 CAPLUS
CN cyclopropanecarboxylic acid, 2,2-dibromo-, methyl ester (9CI) (CA NAME)

939-89-9P 1759-53-1P 6142-57-0P 18180-59-1P 31191-77-2P 31420-47-0P 71666-03-0P 71666-04-1P 71666-05-2P 71666-06-3P

71666-06-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and pKa of, substituent effect in relation to)
939-89-9 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

1759-53-1 CAPLUS Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

RN 6142-57-0 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-, cis- (8CI, 9CI) (CA INDEX NAME) 6142-57-0 CAPLUS

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

RN 18180-59-1 CAPLUS CN Cyclopropanecarboxylic acid, 2-acetyl-, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

31191-77-2 CAPLUS Cyclopropanecarboxylic acid, 2-bromo-, cis- (8CI, 9CI) (CA INDEX

Relative stereochemistry.

31420-47-0 CAPLUS
1,2-Cyclopropanedicarboxylic acid, monomethyl ester, (1R,2S)-rel-(CA INDEX NAME)

Relative stereochemistry.

71666-03-0 CAPLUS Cyclopropanecarboxylic acid, 2-methoxy-, cis- (9CI) (CA INDEX NAME) Relative stereochemistry.

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 71666-02-9 CAPLUS CN Cyclopropanecarboxylic acid, 2-bromo-, methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\mathsf{Br}^{\mathsf{S}} \overset{\mathsf{S}}{\longrightarrow} \mathsf{OMe}$$

L7 ANSWER 114 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

71666-04-1 CAPLUS Cyclopropanecarboxylic acid, 2-ethoxy-, cis- (9CI) (CA INDEX NAME) Relative stereochemistry.

71666-05-2 CAPLUS 1,2-Cyclopropanedicarboxylic acid, monoethyl ester, (1R,25)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

71666-06-3 CAPLUS Cyclopropanecarboxylic acid, 2-chloro-, cis- (9CI) (CA INDEX NAME) Relative stereochemistry.

65475-65-2P 71666-02-9P
RL: RCT (Reactant) / SPN (Synthetic preparation); PREP (Preparation) (prepn. and sapon. of)
65475-65-2 CAPLUS
Cyclopropanecarboxylic acid, 2-chloro-, methyl ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 115 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
1171LE:
1171LE

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 2206	A1	19790613	EP 1978-101377	19781116
R: BE, CH, BR 7807708	DE, FR	19790731	BR 1978-7708	19781123
ES 475346	A1	19791016	ES 1978-475346	19781123
ZA 7806606	A	19791031	ZA 1978-6606	19781123
DD 140248 AT 7808366	C A	19800220 19800615	DD 1978-209276 AT 1978-8366	19781123 19781123
AT 360500	В	19810112	AI 1978-8300	19781123
SU 812165	A3	19810307	SU 1978-2690456	19781123
JP 54081215	A2	19790628	JP 1978-144355	19781124
PRIORITY APPLN. INFO	. :		CH 1977-14405	19771124
			CH 1978-11075	19781026
			CH 1977-14406	19771124

RRICCICH2CC12COC1 (R = F, R1 = H or F; R = C1, R1 = H or C1) were by the addn. reaction of CC13COR2 (R2 = C1, OH or alkowy) with RRICCIR12 in

the presence of one or more of CuCl, CuCl2, CuBr, CuBr2 or Cu powder

catalyst, followed by treatment with a chlorinating agent when R2
= OH or alkowy. Thus, CC12:CH2 was added to CC13CO2Me in MeCN in the
presence of CuCl to give C13CCH2CC12CO2Me, which gave C13CCH2CC12COC1

mon

ΙT

heating 40 h with concd. HCl. 52315-07-8P 59042-49-8P 59042-50-1P 60310-82-9P RL: SPN (Synthetic preparation); FREP (Preparation)

(prepn. of)
52315-07-8 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

59042-49-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,

ANSWER 115 OF 139 CAPLUS COPYRIGHT 2002 ACS (1R,3R)-rel- (9CI) (CA INDEX NAME) (Continued)

Relative stereochemistry.

59042-50-1 CAPLUS

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN CN 60310-82-9 CAPLUS Cyclopropanecarboxylic acid, 3-(2-chloroethenyl)-2,2-dimethyl- (9CI) (CA INDEX NAME)

ANSWER 116 OF 139 CAPLUS COPYRIGHT 2002 ACS 9CI) (CA INDEX NAME) (Continued)

RN 2-CN Cyclop INDEX NAME) 20121-71-5 CAPLUS Cyclopropanecarboxylic acid, 1-ethyl-, ethyl ester (8CI, 9CI) (CA

71441-76-4 CAPLUS Cyclopropanecarboxylic acid, 1-methyl-, ethyl ester (6CI, 9CI) (CA

71441-77-5 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-, methyl ester (6CI, 7CI, 9CI) INDEX NAME)

L7 ANSWER 116 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:540408 CAPLUS
DOCUMENT NUMBER: 91:140408
TITLE: Cyclization of .gamma.-chlorocarboxylic acid

Schwarze, Werner; Kleemann, Axel
Deutsche Gold- und Silber-Scheidesnstalt vorm.
Roessler, Fed. Rep. Ger.
Ger. Offen, 10 pp.
CODEN: GWXXEX
Patent
German esters INVENTOR(S): PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2751133	A1	19790517	DE 1977-2751133	19771116
NL 7808602	A	19790518	NL 1978-8602	19780818
GB 2008110	Α	19790531	GB 1978-43736	19781108
FR 2409255	A1	19790615	FR 1978-31874	19781110
BE 872029	A1	19790514	BE 1978-46669	19781114
JP 54079254	A2	19790625	JP 1978-139480	19781114
RICRITY APPLN. INFO	.:		DE 1977-2751133	19771116

RITY APPLM. INFO::

Cyclopropanecarboxylate esters were prepd. by cyclization of

.gamma\_-chloro aliph. esters in the presence of Na or X alcoholates.

Thus, ClCH2CH2CHMeCOZEt added slowly to MeONa in PhMe with removal of

6887-83-8 CAPLUS Cyclopropanecarboxylic acid, 1-methylethyl ester (9CI) (CA INDEX CN NAME)

RN CN 8CI, 16783-11-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-, ethyl ester (6CI, 7CI,

L7 ANSWER 117 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
1717LE:
INVENTOR(s):
PATENT ASSIGNEE(s):
SOURCE:
COURT TYPE:
LANGGAGE:
ACCESSION NUMBER:
1979:38578
CAPLUS
90:38578
CAPLUS
POTENTIAL
POTENTI

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2810098	A1	19780928	DE 1978-2810098	19780308
GB 1553638	A	19791003	GB 1977-10401	19770311
ZA 7801136	A	19790228	ZA 1978-1136	19780227
AU 7833779	A1	19790906	AU 1978-33779	19780302
AU 519324	B2	19811126		
NL 7802644	A	19780913	NL 1978-2644	19780310
FR 2383159	A1	19781006	FR 1978-6971	19780310
JP 53116350	A2	19781011	JP 1978-27564	19780310
CH 634036	A	19830114	CH 1978-2667	19780310
US 4332962	A	19820601	US 1981-238950	19810227
PRICRITY APPLN. INFO.	:		GB 1977-10401	19770311
			US 1978-883310	19780303
			US 1979-49322	19790618

GΙ

AB Cyclopropanecarboxylates I (R = Cl, Br) with increased cis-trans ratio were prepd. by cyclizing R2C:CHCH:CHe2 with N2CHCO2Et in an inert

were prepd. by cyclizing RZC:CHCH:CMe2 with N2CHCO2Et in an inert rent
(e.g., ClCH2CH2Cl) in the presence of a Rh (II) salt [e.g. Rh (II) pivalate, benzoate, chloroscetate, .alpha.-D-methylcamphorate] as catalyst at 20- 80.degree, and 30-300 min. Cis-I (R = Cl) has double the insecticidal activity of the trans isomer.

\$701-06-9 55701-07-0 SPLUS
(conversion of, to acid chloride)
55701-07-0 CAPLUS
63142-56-3P 63142-57-4P 68803-85-0P
68803-86-1P 68802-55-2P
68803-86-1P 68802-55-2P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)

IT

(prepn. of)

RN 6312-56-3 CAPJUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dichlorosthenyl)-2,2-dimethyl-,ethyl

ANSWER 117 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R,3R)-rel- (9CI) (CA INDEX NAME) (Continued)

#### Relative stereochemistry.

63142-57-4 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, ethyl ester, (1R,3S)-rel- (9CI) (CA INDEX NAME)

## Relative stereochemistry.

68803-85-0 CAPLUS 68803-86-1 CAPLUS 68852-56-2 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester, [1s-[1.alpha.[R\*),3.alpha.]]- (9CI) (CA INDEX

68852-57-3 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
1-methylheptyl ester, [IR-[1.alpha.(S\*),3.alpha.]]- (9CI) (CA INDEX NAME

#### Absolute stereochemistry.

L7 ANSWER 118 OF 139 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1979: 22404 CAPLUS
DOCUMENT NUMBER: 90:22404
Dihalavinylcyclopropanecarboxylic acids and their esters
INVENTOR(S): Lantzsch, Reinhard
BAYENT ASSIGNEE(S): Ger. Offen., 19 pp.
CODEN: GWXXEX
DOCUMENT TYPE: Patent
LANGUAGE: GWXEX
FAMILY ACC. NUM. COUNT: 1
FAMILY ACC. NUM. COUNT: 1 FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2710174	A1	19780914	DE 1977-2710174	19770309
US 4217300	A	19800812	US 1978-879424	19780221
GB 1566692	A	19800508	GB 1978-8783	19780306
IL 54200	A1	19830731	IL 1978-54200	19780306
JP 53112853	A2	19781002	JP 1978-25076	19780307
AT 7801618	A	19790615	AT 1978-1618	19780307
AT 354415	В	19790110		
CH 634033	A	19830114	CH 1978-2469	19780307
DK 7801022	A	19780910	DK 1978-1022	19780308
NL 7802537	A	19780912	NL 1978-2537	19780308
FR 2383158	A1	19781006	FR 1978-6662	19780308
FR 2383158	B1	19830819		
BR 7801411	Α	19781031	BR 1978-1411	19780308
BE 864696	A1	19780911	BE 1978-185769	19780309
US 4265819	Α	19810505	US 1979-75363	19790913
PRIORITY APPLN. INFO.	:		DE 1977-2710174	19770309
			US 1978-879424	19780221
GI				

 $R^4R^5C = CH$ CO2R3

AB Four dihalovinylcyclopropanes I [R1, R2 = H, C1-4 alkyl, CR1R2 = C.ltoreq.7 cycloaliph. moiety/ R3 = H, C1-4 alkyl, (un)substituted arylor heteroaryl methyl; R4 = R5 = F, Cl, Br], useful as insecticides data) or their intermediates, were prepd. Thus valerolactone II in PhMe was heated with SOC12 12 h at 75-80.degree. and the mixt. stirred 8 h with HCl-satd. EtOH at room temp, to give ClCMe2CH(CH:CCl2)CH2CO2Et which dehydrohalogenated with 50% KOH in the presence of Bu4N+Cl- in PhMe

ANSWER 117 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

68852-58-4 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester, [15-[1.alpha.(R\*),3.beta.]]- [9CI] (CA INDEX

# Absolute stereochemistry.

68852-59-5 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 1-methylheptyl ester, [1R-[1.alpha.(S\*),3.beta.]]- (9CI) (CA INDEX

## Absolute stereochemistry.

ANSWER 118 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
give 914 I (R1 = R2 = Me, R3 = Et, R4 = R5 = C1).
59609-49-3P 59898-05-4P 59952-39-5P
61949-76-6P 61949-77-7P
RL: SFN (Synthetic preparation), PREP (Preparation)
(prepn. of)
59609-49-3 CAPLUS
Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
/l

ester (9CI) (CA INDEX NAME)

59898-05-4 CAPLUS Cyclopropanecarboxylic acid, 3-{2,2-dibromoethenyl}-2,2-dimethyl-, ester (9CI) (CA INDEX NAME)

59952-39-5 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-(9CI) (CA INDEX NAME)

61949-76-6 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 118 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

61949-77-7 CAPLUS (3-phenoxyphenyl) methyl ester, (1R,35)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 119 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

L7 ANSWER 119 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:22342 CAPLUS
DOCUMENT NUMBER: 90:22342
TITLE: Ethyl
2,2-dimethyl-3,5-5-triblronbexane-1-carboxylate
INVENTOR(S): Ide, Junyar Nakata, Yasuo; Endo, Rokuro
SARKyo Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JICKAF
DOCUMENT TYPE: Patent
LANGUAGE: PAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION: 1

ethyl

ester (9CI) (CA INDEX NAME)

68620-35-9 CAPLUS Cyclopropanecarboxylic acid, 3-{2-chloro-1-propenyl}-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

68620-36-0 CAPLUS Cyclopropanecarboxylic acid, 3-(2-chloro-1-propenyl)-2,2-dimethyl-

(CA INDEX NAME)

L7 ANSWER 120 OF 139
ACCESSION NUMBER:
DSCUMENT NUMBER:
1978:529076 CAPLUS
89:129076
TITLE:
Facile preparation of optically active
c-2,t-3-dimethyl-r-l-methoxycyclopropane
Andrist, A. Harry; Agnello, Richard M.; Wolfe,

AUTHOR(S): David

C. Dep. Chem., Cleveland State Univ., Cleveland, CORPORATE SOURCE: Ohio,

Ohio,

USA

SOURCE: J. Org. Chem. (1978), 43(17), 3422-3

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal
LANGUAGE: English

AB Optically active c-2,t-3-dimethyl-r-1-methoxycyclopropane was prepd.

trifluoromethanesulfonate catalyzed reaction of trans-2-butene with Et diazoacetate, followed by (2) formic acid transesterification to give the

the corresponding carboxylic acid, (3) fractional recrystm. of the diastereomeric quinine salts and subsequent hydrolysis to the optically active acid, (4) conversion to the active ketone with MeLi, (5) Baeyer-Villiger oxidm. to the optically-active cyclopropyl acetate, (6)

(6) conversion to the cyclopropanol with MeLi, and (7) AlCl3-catalyzed methylation with diazomethane.

IT 66791-91-1P 66791-92-2P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation) (prepn. and hydrolysis of)
RN 66791-91-1 CAPLUS
CN Cinchonan-9-ol, 6'-methoxy-, (8.alpha.,9R)-,
(1.alpha.,2.alpha.,3.heta.)-(-)
)-2,3-dimethylcyclopropanecarboxylate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 20431-71-4 CMF C6 H10 O2 CDES \*

Rotation (-). Absolute stereochemistry unknown.

CM 2

CRN 130-95-0 CMF C20 H24 N2 O2

ANSWER 120 OF 139 CAPLUS COPYRIGHT 2002 ACS CDES 4:8A,9R.CINCHONAN (Continued)

Absolute stereochemistry.

RN 66791-92-2 CAPLUS
CN Cinchonan-9-ol, 6'-methoxy-, (8.alpha.,9R)-,
(1.alpha.,2.alpha.,3.beta.)(+)-2,3-dimethylcyclopropanecarboxylate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 20431-72-5 CMF C6 H10 O2 CDES \*

Rotation (+). Absolute stereochemistry unknown.

CM 2

CRN 130-95-0 CMF C20 H24 N2 O2 CDES 4:8A,9R.CINCHONAN

L7 ANSWER 120 OF 139 CAPLUS COPYRIGHT 2002 ACS (prepn. of, and reaction with methyllithium) RN 20431-71-4 CAPLUS CYClopropanecarboxylic acid, 2,3-dimethyl-, (1.alpha., 2.alpha., 3.beta.)-(-) (9CI) (CA INDEX NAME) (Continued)

Rotation (-). Absolute stereochemistry unknown.



L7 ANSWER 120 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT 20431-72-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation) (prepn. and reaction with methyllithium)
RN 20431-72-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,3-dimethyl-,
(1.alpha., 2.alpha., 3.beta.)(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

IT 20431-63-4P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and resoln. of)
RN 20431-63-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,3-dimethyl-,
(1.alpha.,2.alpha.,3.beta.)(9CI) (CA INDEX NAME)

Relative stereochemistry.

56711-67-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and sapon. of) 56711-67-2 CAPLUS 20431-71-2 CAPLUS

RL: SPN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1578:508232 CAPLUS
DOCUMENT NUMBER: 89:108232
TITLE: 4 highly enantioselective synthesis of

cyclopropane

derivatives through chiral cobalt(II) complex catalyzed carbenoid reaction. General scope and factors determining the enantioselectivity Nakamura, Akira; Konishi, Akira; Tatsuno,

Yoshitaka,

Otsuka, Sei

CORPORATE SOURCE: Fac. Sci., Osaka Univ., Osaka, Japan

SOURCE: J. Am. Chem. Soc. (1978), 100(11), 3443-8

CODEN: JACSAT, ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: English

AB Optically active cyclopropane derivs., e.g., cis- and trans-2phenylcyclopropanecarboxylic acid, were prepd. by carbenoid-type reactions

phenylcyclopropanecarboxyiic acid, were preportions
between olefins and diazoalkanes catalyzed by bis[(-)-camphorquinone.alpha.-dioximato]cobalt(II). A high enantioselectivity (max. 88t
optical
yield) was achieved with a high chem. yield (90-95t) for the prepn. of
necpentyl trans-2-phenylcyclopropanecarboxylate using a 3 molt
catalyst concn. at 0.degree. The reaction occurs selectively at
a terminal double bond conjugated with a vinyl, aryl or alkoxycarbonyl
group. Diazo compds. contg. electron-attracting groups (COZR, COR or
CN)

can be used. The (15) enantiomer was always in large excess (60-80%

in the 2-substituted cyclopropanecarboxylates obtained with this catalyst.
699-23-0P 939-89-9P 939-90-2P
2183-90-6B 3999-56-2P 7150-12-1P
16205-67-7P 27070-05-9P 27070-06-0P
34702-95-0P 934703-09-9P 52345-59-2P
52345-60-5P 67428-04-0P 67428-05-1P
67428-05-2P 67428-07-3P 67463-06-3P
67428-05-2P 67428-07-3P 67463-06-3P
67463-07-4P 67463-08-5P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
699-23-0 CAPLUS
Cyclopropanecarboxylic acid, 2-cyano-, ethyl ester, (1R,25)-rel- (9CI)
(CA INDEX NAME)

Relative stereochemistry.

939-89-9 CAPLUS

Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.

939-90-2 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 2183-. CN Cyclopropau. (9CI) (CA INDEX NAME) 2183-90-6 CAPLUS Cyclopropanecarboxylic acid, 2-ethenyl-, ethyl ester, (1R,2S)-rel-

Relative stereochemistry.

3999-56-2 CAPLUS Cyclopropanecarboxylic acid, 2-cyano-, ethyl ester, (1R,2R)-rel-

(CA INDEX NAME)

Relative stereochemistry.

7150-12-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX

NAME)

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

34703-00-9 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1s,2R)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

52345-59-2 CAPLUS Cyclopropanecarboxylic acid, 2-(1-methylethenyl)-, ethyl ester, (1R, 2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

52345-60-5 CAPLUS Cyclopropanecarboxylic acid, 2-ethenyl-2-methyl-, ethyl ester, (IR,25)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

67428-04-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-diphenyl-, ethyl ester, (15)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

16205-67-7 CAPLUS 1,2-Cyclopropanedicarboxylic acid, dimethyl ester, {IS-trans}- (9CI)

INDEX NAME)

Absolute stereochemistry.

RN 27070-05-9 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, ethyl ester, (1R, 2R)-rel-(9C1) (CA INDEX NAME)

Relative stereochemistry.

RN 27070-06-0 CAPLUS CN Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, ethyl ester, (1R,2S)-rel-(9C1) (CA INDEX NAME)

Relative stereochemistry.

34702-96-0 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, ethyl ester, (1s,2s)- (9CI)

INDEX NAME)

Absolute stereochemistry. Rotation (+).

L7 ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

67428-05-1 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-phenyl-, 2-ethyl 1-methyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

67428-06-2 CAPLUS Cyclopropanecarboxylic acid, 2-(2-phenylethenyl)-, ethyl ester, [1.alpha.,2.alpha.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

67428-07-3 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,2-dimethylpropyl ester, (15-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

67463-06-3 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1-phenyl-, 2-ethyl 1-methyl ester, (15-trans) - (9C1) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 121 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

67463-07-4 CAPLUS Cyclopropanecarboxylic acid, 2-(2-phenylethenyl)-, ethyl ester, [1.alpha.,2.beta.(E)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

67463-08-5 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl-, 2,2-dimethylpropyl ester, (15-trans) - (SCI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 122 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
I (R = H, R1 = Me, R2 = C1).
55701-05-8P 61898-95-1P
RL: SFN (Synthetic preparation), PREP (Preparation)
(prepn. of)
55701-05-8 CAPLUS
Cyclopropanecarboxylic acid, 3-{2,2-dichloroethenyl}-2,2-dimethyl-

(CA INDEX NAME)

RN 61898-95-1 CAPLUS
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
methyl ester (9CI) (CA INDEX NAME)

ANSWER 122 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1978:152110 CAPLUS 68:152110 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: INVENTOR(S): 88:152:10 Substituted cyclopropanecarboxylic acid esters Mori, Fumio; Ommura, Yusho; Nishida, Takuji; Itoi,

PATENT ASSIGNEE(S): SOURCE: Kuraray Co., Ltd., Japan Japan. Kokai, 12 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Japanese 3

APPLICATION NO. PATENT NO. DATE DATE KIND JP 1976-50595
GB 1976-30587
US 1981-311896
US 1982-350566
JP 1975-89507
JP 1975-158047
JP 1976-50595
US 1976-705176
US 1977-840279 JP 52133953 GB 1561502 US 4458090 US 4468521 PRIORITY APPLN. INFO.: 19760430 19760722 19811015 19820222 19750722 19751229 19760430 19760714 19771007 A2 A A A 19771109 19800220 19840703 19840828

Me 
$$_{\text{Me}}$$
  $_{\text{CH}=\text{CR}^22}$   $_{\text{R}}$   $_{\text{CO}_2\text{R}^3}$  II

AB R102CCHRCMe2CHR2CH2CR23, R102CCHRCMe2CHR2CH:CR22 (I), R02CCHRCMe2CH:CRCR23 (R = H, alkyl; R1 = alc. residue; R2 = halo), or their mixts. were treated ted with alkali hydroxide and then with acids to give the cyclopropanecarboxylic acid esters II (R3 = alc. residue) and 3,3-dimethyl-4-(2,2-dihalovinyl)-4-butanolide (III), which were sept. heating with an acid catalyst. III was treated with H halide and alc. to regenerate the starting material. II were useful for manufg.

pyrethrin pesticides (no data). Thus, 26 parts I (R = H; R1 = Me; R2 Cl), was treated with NaOH-MeOH to give a mixt. of II (R = H, R2 = C1, R3 - Me) and III, which was refluxed in MeOH-p-MeC6H4SO3H for 20 h to give a mixt. contg. 69% II (R - H, R2 - Cl, R3 - Me) and 26% III, which was evapd. in vacuo to give 13.9 parts I (R - H, R2 - Cl, R3 - Me) and 4.7 parts III. III was treated with 50% HCl-MeOH overnight to give 5.6 parts

L7 ANSWER 123 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
1171LE:
Chemistry of gem-dibromocyclopropanes. XII.
Preparation of gem-dibromocyclopropyl ketones and alkyl gem-dibromocyclopropanecarboxylates under

AUTHOR(S): CORPORATE SOURCE: SOURCE:

transfer conditions Sydnes, Leiv K. Action Chem., Univ. Oslo, Oslo, Norway Acta Chem. Scand., Ser. B (1977), 31(9), 823-5 CODEN: ACBOCV JOURNAL

DOCUMENT TYPE: LANGUAGE: GI

phase

Treatment of R1CH:CR2CO2R3 (R1 - H, Me, Ph; R2 - Me, Ph; R3 - Me, Et,

with 30-100% excess of HCX3 (X = C1, Br), and 5-fold excess of base

h in the presence of Et3N+CH2PhCl- gave 6-95% cyclopropanes I.

A in the presence - Similarly, MeCOCMe:CH2 gave 79% 2-acetyl-1,1-dibromo-2-methylcyclopropane.

of mesityl oxide, phorone, and Me cinnamate with CHBr3 gave no identifiable products. When carvone and CHX3 were exposed to the

transfer conditions a regioselective reaction took place and 7,7-dihalo-4-isopropenyl-1-methylbicyclo[4.1.0]heptan-2-one was the

only isolatable product; no compd. arising from addn. to the exocyclic

double

le bond was detected. 1447-13-8P 1447-14-9P 5365-21-9P 39646-99-6P 39647-01-3P 39647-03-5P 58683-49-1P 65655-78-9P 65655-79-0P 65655-80-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
1447-13-8 CAPUS
Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, methyl ester CN Cyclopropaneous.
(7CI,
8CI, 9CI) (CA INDEX NAME)

1447-14-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl- (6CI, 7CI, 8CI, (CA INDEX NAME)

RN 5365-21-9 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl- (7CI, 8CI, 9CI) INDEX NAME)

RN 39646-99-6 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dichloro-1-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 39647-01-3 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl-, methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 123 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 65655-80-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl-3-phenyl-, ethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 123 OF 139 CAPLUS COPYRIGHT 2002 ACS

RN 39647-03-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl-, butyl ester (9CI)
(CA INDEX NAME)

RN 58683-49-1 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dibromo-1-methyl-, ethyl ester (9CI)
(CA INDEX NAME)

65655-78-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dibromo-1-phenyl-, ethyl ester (9CI) INDEX NAME)

65655-79-0 CAPLUS Cyclopropancatoxylic acid, 2,2-dibromo-1,3-dimethyl-, ethyl ester, trans- (SCI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1578:37973 CAPLUS
DOCUMENT NUMBER: 88:37973
Asymmetric synthesis of chrysanthemic acid. An application of copper carbenoid reaction Aratani, T., Yoneyoshi, Y., Nagase, T.
CORPORATE SOURCE: Cent. Res. Lab., Sumitomo Chem. Co., Ltd., Osaka, Japan
SOURCE: Tetrahedron Lett. (1977), (30), 2599-602
CODEN: TELEAY
DOCUMENT TYPE: Journal
LANGUAGE: English

DOCUMENT TYPE: LANGUAGE: GI

AB Alkyl chrysanthemates were prepd. by reaction of alkyl diazoacetates with

(Me2C:CH)2 (I) in the presence of the copper complexes II [R = Me, Rl  $\,$ 

5,2-Me3C[Me(CH2) 70]C6H3, 2.5-Bu0(Me3C)C6H3; R = FhCH2, R1 = 5,2-MeC[Me(CH2) 60]C6H3]. E.g., 1-menthyl diazoacetate with I and (R)-II

II [R = Me, R1 = 5,2-Me3C[Me(CH2)70]C6H3] at 20.degree. for 7 h gave 72% l-menthyl chrysanthemate with 94% enantiomeric excess (ee) of the

s isomer. A catalyst of R-configuration gives d-chrysanthemic acid in both cis and trans isomers. The bulkier the alkyl group of

the

diazo compd. the higher the trans/cis ratio of the product and the ee of

IT

the trans isomer.
4638-92-0P
RL: SFN (Synthetic preparation); PREP (Preparation)
(asym. prepn. of)
4638-92-0 CAPUS

4638-92-U CAPUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

26771-11-9P 40999-13-1P 56194-30-0P 63254-59-1P 63323-85-3P 63323-87-5P 64312-83-0P 65395-64-4P 65395-85-5-P 65395-65-P 65395-66-6P 65395-67-7P 65437-24-3P 65437-28-7P 65437-29-8P 65437-37-6P 65437-29-8P 65437-30-1P 65437-22-3P 65437-30-1P 6547-31-6547-31-65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31-9 65437-31 ΙT

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

40999-13-1 CAPLUS 40999-13-1 CAPLUS (CYCLOpropaneCarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,3R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

56194-30-0 CAPLUS Cyclopropanecathoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1-dimethylethyl ester, (IR-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

64312-83-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1-dimethylethyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65395-64-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, tricyclo[3.3.1.13,7]dec-1-yl ester, (1R-trans)- (9CI) (CA INDEX

Absolute stereochemistry.

65395-65-5 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,2-dimethyl-1-(1-methylethyl)propyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

63254-59-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(S\*),3.beta.]]- [9CI) (CA INDEX

Absolute stereochemistry.

63323-85-3 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(IR,25,58)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (IR,35)-(9CI) (CA

INDEX NAME)

Absolute stereochemistry.

63323-87-5 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [IR-[1.alpha.(5\*),3.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65395-66-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-{2-methyl-1-propenyl}-, 1,1,2-trimethylpropyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65395-67-7 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1-dimethyl-2-phenylethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65437-24-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [1S-[1.alpha.(1S\*,3S\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65437-25-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,5-methyl-2-(1-methylethyl)cyclohexyl ester, [1S-[1.alpha.(1S\*,3S\*),2.alpha.,5.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65437-26-5 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, cyclohexyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

65437-27-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 5-methyl-2-(1-methylethyl)cyclohexyl ester, [1s-[1.alpha.(1s\*,3R\*),2.beta.,5.alpha.]]- (9CI) (CA INDEX NAME)

# Absolute stereochemistry.

65437-28-7 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
5-methyl-2-(1-methylethyl)cyclohexyl ester, [1S-

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

65437-32-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1-dimethyl-2-phenylethyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

65450-90-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, cyclohexyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

ANSWER 124 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) [1.alpha.(15\*,3R\*),2.alpha.,5.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

65437-29-8 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, tricyclo[3.3.1.13,7]dec-1-yl ester, (1R-cis)- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

65437-30-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,2-dimethyl-1-(1-methylethyl)propyl ester, (1R-cis)- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

65437-31-2 CAPLUS Cyclopropancathoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1,1,2-trimethylpropyl ester, (IR-cis)- (9CI) (CA INDEX NAME)

ANSWER 125 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1977:534690 CAPLUS MENT NUMBER: 87:134690 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: INVENTOR(S):

87:134690 Phenoxybenzyl esters Wood, Derek Alexander shell int., Neth. Ger. Offen., 14 pp. CODEN: GWXXBX Patent German PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: German 1

PAILMI INFORMATION:				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2651341	A1	19770526	DE 1976-2651341	19761110
GB 1559799	A	19800130	GB 1975-46700	19751112
NL 7612461	Α	19770516	NL 1976-12461	19761110
JP 52062238	A2	19770523	JP 1976-134268	19761110
JP 61008053	B4	19860311		
FR 2331545	A1	19770610	FR 1976-33901	19761110
FR 2331545	B1	19801107		
BR 7607517	A	19770920	BR 1976-7517	19761110
IL 50880	A1	19801026	IL 1976-50880	19761110
CH 621109	A	19810115	CH 1976-14181	19761110
US 4118413	A	19781003	US 1977-824459	19770815
US 4118413	B1	19840124	US 1983-90000233	19830726
PRIORITY APPLN. INFO.	:		GB 1975-46700	19751112
			US 1976-737312	19761101
			US 1977-824459	19770815

AB Pesticidal RCO2CHR1C6H4OPh (R = substituted cyclopropyl, 4-clc6H4CHCMe2; R1 = H, CN) were prepd. by the reaction of a stirred neutralized aq. R1 = H, CN) were prept. By the resolve. The followed by the add a phase-transfer agent, e.g., a quaternary ammonium salt. Thus, aq. 4-CLCGH4CH(COZH) CHME2 was neutralized with KZCO3, followed by the addn. of Bu4NBr (I), 3-PhOCGH4CHBrCN, and PhMe, and the mixt. Was stirred at 35.degree. to give

98% 4-ClC6H4CH(CHMe2)CO2CH(CN)C6H4OPh-3 of 98% purity, compared to 40% yield without I. 15641-58-4 53179-78-5 55701-05-8 63538-10-3 63597-73-9

o3s38-10-3 c3s97-73-9
RE: RCT (Reactant)
(esterification of, by phenoxybenzyl bromides)
15641-58-4 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6CI, 8CI, 9CI) (CA
INDEX NAME)

L7 ANSWER 125 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

53179-78-5 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

55701-05-8 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-(9CI) (CA INDEX NAME)

63538-10-3 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

CAPIUS (Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 125 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$\begin{array}{c|c} & \text{Me} & \text{Me} \\ & \text{Dr}_2 \text{C} = \text{CH} & \begin{array}{c} \text{C} - \text{O} - \text{CH} \\ \text{O} & \text{CN} \end{array} \end{array}$$

ANSWER 125 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT

39515-41-8P 52315-07-8P 52645-53-1P 52620-00-5P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
39515-41-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, cyano(3-phenoxyphenyl)methyl ester (9Cl) (CA INDEX NAME)

52315-07-8 CAPLUS Cyclopropancarphonylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyanc(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

52645-53-1 CAPLUS Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

52820-00-5 CAPLUS Cyclopropancarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (SCI) (CA INDEX NAME)

L7 ANSWER 126 OF 139
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
INVENTOR(S):

CAPLUS COPYRIGHT 2002 ACS 1977:468506 CAPLUS 87:68506 Optically active alkylchrysanthemate Aratani, Tadatoshi; Yoneyoshi, Yukio; Fujita, Fumio:

Nagaze, Tsuneyuki Sumitomo Chemical Co., Ltd., Japan Ger. Offen., 28 pp. CODEN: GWXXEX Patent 3 PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE DE 2634663 Al 19770317 DE 1976-2634663 19760802

DE 2634663 B2 19790531

DE 2634663 C3 19800117

JF 52017448 A2 19770209 JF 1975-94349 19750801

JF 59010336 B4 19840308

PRIORITY APPLN. INFO:

GI For diagram(s), see printed CA Issue.

AB Optically active alkyl chrysanthemates were prepd. by treating the appropriate alkyl diazoacetates with Me2C:CHCH:CMe2 in the presence of a

Cu complex with chiral ligands. For example, a soln. of 0.03 g (R)-I

[R1 - Me, R2 - O(CH2) 7Me] in 17.6 g Me2C:CHCH:CMe2 was treated with a mixt. of 4.4 g Me2C:CHCH:CMe2 and 1-menthyl diazoacetate to give 4.7 g of a stereoisomeric mixt. of 1-menthyl diazoacetate to give 4.7 g of a stereoisomeric mixt. of 1-menthyl chrysanthemates, sepd. by gas chromatog.

I [R1, R2, abs. configuration of ligand given: Me, O(CH2) 7Me, S; Me, OCHMe2, S; Me, OBU, R: CH2Ph, O(CH2) 6Me, R: CH2Ph, O(CH2) 6Me, S] also reacted with the diazoacetates of dl-menthol, d-menenthol, dl-borneol,

1-adamantanol, cyclohexanol, .alpha.,.alpha.-dimethyl-.beta.-(1-menthyloxy) ethanol, Me3CGH, Me2CHCMe2OH, (Me2CH) 2CMeOH, or PhCMe2OH to give the optically active alkyl chrysanthemates.

II 10453-89-1P

RL: PREF (Preparation)

10453-89-1P
RLI PREP (Preparation)
(by hydrolysis of alkyl chrysanthemates)
10453-89-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-CN (9CI)

(CA INDEX NAME)

L7 ANSWER 126 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT 40999-13-1P 40999-14-2P 63323-05-3P
63323-06-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of)
RN 40999-13-1 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,3R)(9CI) (CA
INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 40999-14-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (IR,25,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (15,3S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

63323-85-3 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,2S,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (1R,3S)-(9CI)

) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 126 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

63323-88-6 CAPLUS

Cyclorropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1S-[1.alpha.(R\*),3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

63323-89-7 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1S-[1.alpha.(R\*),3.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 126 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

63323-86-4 CAPLUS Cyclopropanezarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (IR,25,5R)-5-methyl-2-(1-methylethyl)cyclohexyl ester, (15,3R)- (9CI) (CA

INDEX NAME)

Absolute stereochemistry.

IT 63254-59-1P 63323-87-5P 63323-88-6P 63323-89-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
63254-59-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
1-methylheptyl ester, [1R-[1.alpha.(S\*),3.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

63323-87-5 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, 1-methylheptyl ester, [1R-[1.alpha.(5\*),3.alpha.]]- (9CI) (CA INDEX

Absolute stereochemistry.

L7 ANSWER 127 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1977:88454 CAPLUS DOCUMENT NUMBER: 86:88454

DOCUMENT NUMBER: TITLE:

Esterification of carboxylic acids in presence of intercalary compounds of acid and graphite

bisulfate INVENTOR(S): Setton, Kagan, Henri; Bertin, Jean; Luche, Jean L.;

Ralph Agence Nationale de Valorisation de la Recherche, PATENT ASSIGNEE(S):

Fr. SOURCE: Fr. Demande, 9 pp. CODEN: FRXXBL

DOCUMENT TYPE:

Patent French

LANGUAGE: FAMILY ACC. NUM. CO PATENT INFORMATION: COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2288079 FR 2288079	A1 B1	19760514 19770318	FR 1974-34673	19741015

GI

AB Esterification of carboxylic acids by alcs. is facilitated by treating equimolar amts. of acid and alc. in cyclohexane at room temp. with 30-60%

(on acid) of graphite bisulfate, C24+HSO4-.2H2SO4, prepd. by

(on acid) of graphite distribute, community of 98% H2SO4 on a graphite electrolysis
of 98% H2SO4 on a graphite electrode. Thus, I was prepd. in 98% yield with retention of configuration.

IT 1789-53-1
RL: RCT (Reactant)
(esterification of, with alcs., graphite bisulfate catalyst for)

for)
1759-53-1 CAPLUS
Cyclopropanecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

CO2H

IT 61889-13-2P

L.7 ANSWER 127 OF 139 CAPLUS COPYRIGHT 2002 ACS (CRL: SPN (Synthetic preparation); PREP (Preparation) (Continued) (prepn. of) 61889-13-2 CAPLUS

Cyclopropanecarboxylic acid, 2-methylbutyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 128 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

56907-92-78 ΙT

50907-92-7P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. and conversion to dihydrochrysanthemolactone)
56907-92-7 CAPLUS
56941-78-7P

Solution (Preparation) PREP (Preparation) PREP (Preparation) (prepn. and dehydration of) 56941-78-7 CAPLUS

NN 50941-78-7 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-hydroxy-2-methylpropyl)-2,2-dimethyl-,
trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 56859-08-6P

Sees3-vo-or (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and hydrolysis of) 5685-08-6 CAPLUS 2835-23-1P

2935-23-1P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and purifn. of)
2935-23-1 CAPLUS

2936-23-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(1R,35)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ΙT

56859-09-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and removal from mixt. with cis-chrysanthemic acid)
56859-09-7 CAPLUS

L7 ANSWER 128 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1975:514679 CAPLUS BOCUMENT NUMBER: 613-614679 cis-Chrysanthemumic acid INVENTOR(S): 615-617ysanthemumic acid Honda, Tsohiko; Itaya, Nok

cis-Chrysanthemumic acid Honda, Tsohiko; Itaya, Nobushige; Horiuchi,

Fukashi;

Higo, Akio Sumitomo Chemical Co., Ltd., Japan Ger. Offen., 22 pp. CODEN: GWXXEX Patent PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION	NO. DATE
DE 2440745	A1	19750327	DE 1974-2440	745 19740826
DE 2440745	В2	19760526		
DE 2440745	C3	19770203		
JP 50047952	A2	19750428	JP 1973-965	22 19730827
JP 50082035	A2	19750703	JP 1973-1319	88 19731122
JP 52031333	B4	19770813		
JP 50084549	A2	19750708	JP 1973-1359	976 19731130
NL 7411205	A	19750303	NL 1974-1126	19740822
GB 1432518	A	19760422	GB 1974-3713	30 19740823
US 3989654	A	19761102	US 1974-5000	19740823
DK 7404531	A	19750428	DK 1974-453	1 19740826
DK 134546	В	19761129		
FR 2257565	A1	19750808	FR 1974-2910	19740826
FR 2257565	B1	19790105		
CH 603532	A	19780831	CH 1974-116	56 19740827
PRIORITY APPLN. INFO.	. :		JP 1973-96522	19730827
			JP 1973-131988	19731122

JF 1973-131988 19731122
JF 1973-135976 19731130
For diagram(s), see printed CA Issue.

Me trans-.delta.-hydroxydihydrochrysanthemate (I, R = OH), obtained by hydrolysis of I (R = Cl), was treated with an alkali metal alkoxide to give a mixt. of cis-chrysanthemic acid (I, R = MeZcCH; (III) and cis-isochrysanthenic acid (II, R = CH2:CMeCH2) (IV); the latter ized

cyclized in the presence of a catalyst to give the lactone V which was removed from the mixt. to give a higher conch. of III. Thus, 5 g a

55:45

mixt. of III and IV in 50 ml H20, obtained by treating I (R = OH) with NaOH-NaOHe, was heated with 0.25 g maleic acid for 5 hr, the reaction mixt. acidified and extd. with E20 to give a 9:1 mixt. of III and IV. From the water layer 1.8 g V was isolated. The phenoxybenzyl ester of III

II
was useful as a mosquito insecticide.
705-16-8
RL: RCT (Reactant)
(hydrochlorination of)
705-16-8 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(1R,3R)-rel- (9CI) (CA INDEX NAME)

L7 ANSWER 129 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1375:479389 CAPLUS
DOCUMENT NUMBER: 83:79389
Asymmetric synthesis of chrysanthemic acid.
Application of copper carbenoid reaction
Aratani, T.; Yoneyoshi, Y.; Nagase, T.
CORPORATE SOURCE: Cent. Res. Lab., Sumitomo Chem. Co., Ltd., Osaka,
Japan
SOURCE: Tetrahedron Lett. (1975), (21), 1707-10
CODEN: TELEAY
Journal
LANGUAGE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB NZHCOZEt in (Me2C:CH)2 decompd. in the presence of a Cu catalyst
I to give an isomeric mixt. of the title acid II (R = H). Thus (S)-I
(R =

(R = R1 = Me, R2 = H), prepd. by reaction of (S)-MeCH(NH2)CO2Et with the Grignard reagent derived from 2-MeCC6H4Br and reaction of the resulting alc. with 2-HOC6H4CHO and Cu(OAc)2, reacted with N2CHCO2Et in (Me2C:CH)2 to give 64% of a cis-trans mixt. of the ester II (R = Et). Hydrolysis of this ester gave the title acid II (R = H). When the catalyst I had an (S) configuration, the acid II (R = H) was predominantly levorotatory; when the configuration was (R), dextrorotatory acid II (R =

H) was formed predominantly. The optical activity of the acid II (R

= H)

increased with the bulkiness of the substituents R1 and R2 of I.
15543-65-4P 22467-82-9P
RI: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation)
(prepn. and hydrolysis of)
15543-65-4 CAPLUS
22467-82-9 CAPLUS
2259-14-5P 4638-92-0P 26771-06-2P
26771-11-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
2259-14-5 CAPLUS

CAPIUS (yclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

4638-92-0 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ANSWER 129 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

26771-06-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3R)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

26771-11-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (lR,3S)- (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 130 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
(AcO) 2Cu.H2O. Three III were prepd. by reaction of
bis(salicy)aldebydato) copper with H2MCHR4C(OH) (CGH4CMe-x) 2.
16642-27-69 41641-25-2P 41641-26-3P
41641-27-4P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of)
16642-27-6 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (15,3R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-25-2 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester, (1R,3R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry

41641-26-3 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

41641-27-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethy1-3-(2-methy1-1-propeny1)-, ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

ANSWER 130 OF 139

CAPLUS COPYRIGHT 2002 ACS
1975:3854 CAPLUS
82:3854

ECH CAPSON NUMBER:
82:3854

ECH CAPSON NUMBER:
60: Spearation
NTOR(S):
Aratani, Tadatoshir Nakamura, Shuzo, Nagase,
Tsuneyukir Yoneyoshi, Yukio
Sumitomo Chemical Co., Ltd.
Ger. Offen., 36 pp.
CODEN: GWXXEX
MENT TYPE:
UAGE:
UAGE:
GERMAN

TY ACC. NUM. COUNT:
1 INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT NO.		DATE		DATE
DE 2407094		19740905	DE 1974-2407094	19740214
DE 2407094		19850110	DE 15/4:240/054	13.40214
JP 49102649		19740927	JP 1973-18642	19730214
JP 50018439	A2	19750226		
JP 50014439	A2	19750315	JP 1973-69997	
JP 53043955	B4	19781124	OF 13/3-03337	13/30020
II. 44167	A1	19790930	IL 1974-44167	19740207
NL 7401785	A	19740816		
CH 594593	Ä	19780113		
BE 810959	A1	19740529		
FR 2217312	A1	19740906		19740213
FR 2217312 FR 2217312	B1	19800523	FR 19/4-4901	19/40213
IT 1004954	A	19760720	IT 1974-67422	19740213
DK 136642	В			
SU 689615	<u>n</u>	19790930		
GB 1455189	A	19761110	GB 1974-1999312	
CA 1016553	A1	19770830	CA 1974-192555	
US 4029690	Y Y	19770614	US 1975-549034	
	A	19751128		
		19880502	DK 1975-3401	19/31120
DK 152728	ć	19880926		
			US 1975-645541	19751229
US 4029683	A	19770614	JP 1973-18642	19730214
CORITY APPLN. INFO.	. :			
			JP 1973-69997	
			JP 1973-69998	
			DK 1974-756	19740213
			US 1974-442413	19740214

GI For diagram(s), see printed CA Issue.

AB Mixts. of Et cis- and trans-chrysanthemumate (I), from which chrysanthemumaic acid was obtained by hydrolysis, were prepd. by reaction

of (Me2C:CH) 2 with N2CHCO2Et in the presence of the Cu complexes II

H, 3,5-Br2, 3-Eto, or 5,6-benzo; R1 = Me, CHMe2, CH2CHMe2, CH2Ph, CH2C6H4OCHMe2-4, or cyclohexylmethyl; R2 = C1-8 alkyl, Ph, or CH2Ph;

H, Me, CMe3, or OBu) and III (x = 2 or 3, R4 = CH2Ph or CH2CHMe2). II were prepd. by reaction of salicylaldehydes with H2NCHR1C(OH) [C6H3(OR2)R3-2,5]2 to give the Schiff bases, which reacted with

ANSWER 130 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (15,35)- (9CI) (CA INDEX NAME)

2259-14-5P 4638-92-0P 26771-06-2P 26771-11-9P

26771-11-9P
RI: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
2259-14-5 CAPLUS
Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
(15,38)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

4638-92-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

26771-06-2 CAPLUS

Absolute stereochemistry.

Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3R)- (9CI) (CA INDEX NAME)

ANSWER 130 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 26771-11-9 CAPLUS CCYclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3S)- (SCI) (CA INDEX NAME)

ANSWER 131 OF 139 CAPLUS COPYRIGHT 2002 ACS (CRL: SPN (Synthetic preparation); PREP (Preparation) (Continued) (prepn. of) 827-90-7 CAPLUS 1802-02-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl ester, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 131 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1974:70421 CAPLUS MENT NUMBER: 80:70421 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: 2,2-Dimethyl-3-(2'-methyl)-1'-propenyl-1,3-trans-cyclopropane-1-carboxylic acid and its alkyl esters INVENTOR(S):

Nagase, Tsuneyuki; Suzukamo, Gohfu; Yoneyoshi, Yukio

Yoshioka, Hirosuke Sumitomo Chemical Co., Ltd., Japan Ger. Offen., 37 pp. CODEN: GWXXEX Patena 2 PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2324473	A1	19731129	DE 1973-2324473	19730515
DE 2324473		19770811		•••••
JP 49011855	A2	19740201	JP 1972-48852	19720516
JP 49011856	A2	19740201	JP 1972-49695	19720518
JP 49013149	A2	19740205	JP 1972-56258	19720605
JP 55016568	B4	19800502		
JP 49031883	A2	19740322	JP 1972-77905	19720802
JP 49124049	A2	19741127	JP 1973-25472	19730301
JP 56012626	B4	19810323		
US 3906026	Α	19750916	US 1973-358988	19730510
CA 999011	A1	19761026	CA 1973-171066	19730511
GB 1426000	A	19760225	GB 1973-22869	19730514
BE 799541	A1	19731116	BE 1973-131115	19730515
FR 2184867	A1	19731228	FR 1973-17553	19730515
IT 986561	A	19750130	IT 1973-68398	19730515
CH 581088	A	19761029	CH 1973-6886	19730515
DK 140694	В	19791029	DK 1973-2674	19730515
DK 140694	C	19800519		
SU 929007	A3	19820515		19730515
NL 7306857	A	19731120	NL 1973-6857	19730516
US 3874277	A	19750401	US 1973-374125	19730627
PRIORITY APPLN. INFO.	. :		JP 1972-48852	19720516
			JP 1972-49695	
			JP 1972-56258	19720605
			JP 1973-25472	19730301
			JP 1972-65256	19720618
			JP 1972-65257	19720618
			JP 1972-65255	
			JP 1972-70124	
			JP 1972-70125	19720712
			JP 1972-77906	19720802

or 19/2-70125 19720712 JP 1972-77906 19720802

For diagram(s), see printed CA Issue.

Na, K, NaH, KH, or the reaction product of an alkali metal with the corresponding alkali metal hydroxide and calcined Al203 were used as catalysts in the isomerization of cis-chrysanthemic acid esters to the trans-esters (I; R = Et, Pr, Bu), which were hydrolyzed to trans-chrysanthemic acid (I; R = H).

827-90-7P 1802-02-4P

ANSWER 132 OF 139 CAPLUS COPYRIGHT 2002 ACS
SSION NUMBER: 1973:452672 CAPLUS
MENT NUMBER: 79:52672

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

Stereochemistry. XLIV. Nucleophilic

substitution at

carbon with carbon as leaving group Yankee, Ernest W.; Spencer, Bert; Howe, Norman E.; Cram. Donald J. Dep. Chem., Univ. California, Los Angeles, AUTHOR (S):

CORPORATE SOURCE: Calif., USA SOURCE:

Calif., USA

SOURCE:

J. Amer. Chem. Soc. (1973), 95(13), 4220-30

CODEN: JACSAT

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI For diagram(s), see printed CA Issue.

AB The stereochemical course of nucleophilic reactions with cyclopropane derivatives, [(+)-(E)-I), and [(+)-(Z)-I], were studied. The four stereoisomeres, (+)- and (-)-(E)-I and (+)- and (-)-(Z)-I were prepared in

ared in an optically pure state. The relative configurations of the E and Z isomers were established by NMR spectral comparisons, and by K = 20

(2)-I .dblarw. (E)-I at 25.degree.. The abs. configurations of the Z diastereoisomers were assigned by converting (+)-(Z)-I to (+)-methyl 2-(S)-phenyl-1-(S)-cyclopropanecarboxylate, whose abs. configuration

Was

known. The relative configurations of (+)-(E)-I and (-)-(Z)-I were established by converting their resp. acids to enantiomeric dicyano compds. with a single chiral center. Thus (+)-(E)-I gave (+)-1,1-dicyano-2-(R)-phenylcyclopropane, and (-)-(Z)-I gave (-)-1,1-dicyano-2-(R)-phenylcyclopropane, and (-)-(Z)-I gave (1)-1,1-dicyano-2-(S)-phenylcyclopropane. When heated in MeOH at 126.degree. for 5 days, optically pure (+)-(E)-I underwent methanolysis to give (-)-methyl 2-cyano-4-methoxy-4-phenylbutanoate. This diasteroeisomeric mixt. was converted to (-)-methyl 4-(S)-methoxy-4-phenylbutanoate of 99% optical purity, whose enantiomer was prepd. (max.

rotation) from (+)-(S)-mandelic acid of established configuration.

rotation) from (+)-(5)-measures are the first data indicate the methanolysis of (+)-(E)-I went with 99% inversion of configuration. The reaction is interpreted as occurring through solvated ion-pair intermediates, similar to those obsd. in solvolyses of

ion-pair intermediates, similar to those obsd. in solvolyses of open-chain secondary benzyl compds. Methanolysis kinetics were followed at 100 and

126.degree., and at 126.degree., .DELTA.H.++. = 19.4 .+-. 0.4

D.1 M LiBr, optically pure  $\{-\}$ - $\{2\}$ -I was isomerized  $\{3\}$  half-lives) to 99% optically pure  $\{-\}$ - $\{E\}$ -I, spimerization occurring solely at the cyanoacetate chiral center. At 34 degree, in DMF-0.1 M LiBr, the catalyzed isomerization was .apprx.4000 times faster than thermal

ANSWER 132 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) isomerization in the same medium, and .apprx.8700 times faster than methanolysis at 34.degree. At 25.degree. in DMF-0.1 M LiBr, (2)-I equilibrated with (E)-I (K = 20). At 39.degree. in DMF, the lithium

catalysis of (Z)-I to (E)-I was followed spectroscopically by loss and

appearance of methyl (ester) signals in the nmr. A third methyl

al [attributed to the anion derived by proton loss from methyl 4-azido-2-cyano-4-phenylbutanoate (II)] appeared after a short time, went

through a max., and then decreased as the signal of (E)-I increased. From

"
a reaction mixt., quenched with water at max. intermediate signal,

isolated II. Treatment of a DMF solution of II with sodium hydride at

25.degree. gave (E)-I/ $\{Z\}$ -I .apprx.10. The catalyzed isomerization reactions are interpreted as involving consecutive SN2 reactions.

anionic nucleophile opens the three-membered ring to produce a

carbanion,
which rotates, and displaces the nucleophile to regenerate the

which rotates, and displaces the nucleophile to regenerate the cyclopropane disastereomer.
31002-44-5P 31002-46-7P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction with diazomethane)
31002-44-5 CAPLUS
Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, (1S-trans)- (9CI)

INDEX NAME)

Absolute stereochemistry.

31002-46-7 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, (1R-trans)- (9CI)

Absolute stereochemistry

42332-64-9P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and resoln. of)

ANSWER 132 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

31002-48-9 CAPLUS
Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, (1R-cis)- (9CI) (CA

Absolute stereochemistry

RN 31002-49-0 CAPLUS CN Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, methyl ester, (1S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 42332-43-4 CAPLUS

ANSWER 132 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 42332-64-9 CAPLUS COCLOPROPARECATEDOXYLIC acid, 1-cyano-2-phenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

42332-42-3P 42332-43-4P 42369-70-0E

42332-42-39 42332-43-49 42365-70-0P RL: SPN (Synthetic preparation), PREP (Preparation) (prepn. and resolution of) 42332-42-3 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, methyl ester, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.

42332-43-4 CAPLUS 42369-70-0 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2-phenyl-, methyl ester, cis-CN (9CI)

(CA INDEX NAME)

Relative stereochemistry.

16205-72-4P 31002-48-9P 31002-49-0P
42332-43-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
16205-72-4 CAPLUS
Cyclopropanecarboxylic acid, 2-phenyl-, methyl ester, (18,25)- (9CI)

INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 133 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1973:452515 CAPLUS DOCUMENT NUMBER: 79:52515 TITLE: Stereocherical Stereoche Stereochemistry. XLIII. Racemizations and

solvolyses

of cyclopropanes through carbanion-carbonium ion intermediates Yankee, Ernest W.; Badea, Florin D.; Howe, Norman AUTHOR (S):

Cram, Donald J. Dep. Chem., Univ. California, Los Angeles, CORPORATE SOURCE: Calif., USA SOURCE:

Calif., USA
SOURCE: J. Amer. Chem. Soc. (1973), 95(13), 4210-19
CODEN: JACSAT
JOURNAL TYPE: JOURNAL
LANGUAGE: English
AB Optically pure (+) - and (-) methyl 1-cyano-2, 2diphenylcyclopropanecarboxylate (I) were prepd. Racemizations
(first-order rate const., kr) and solvolyses (first-order rate

const., kg and (-)-I were studied. In C6H6 and dry DMF only racemization was obsd. In MeOH at 100.degree., kr/ks > 102. At 150.degree. in MeOH (.+-)-I gave 464 methyl 2-cyano-4,4-diphenyl-4-methoxybutanoate and

1,1-diphenylpropene-3-carbonitrile. In AcOH at 100.degree., kr/ks.apprx.0.5, and olefin was the main solvolysis product. In AcOH-0.1 Mp-toluenesulfonic acid, kr/ks.apprx.4 at 100.degree.. At 50.degree.

HCO2H, kr/ks .apprx.15. In DMF, racemization was catalyzed by, and

first order in, free bromide ion from 0.0132 to 0.0380 M LiBr. In AcOH,

the racemization-solvolysis reactions were p-toluenesulfonic acid catalyzed and followed He. Values of (kr + ks) rel at 126.degree.

: C6H6, 1; DMF, 5; MeOH, 20; AcOH, 25; DMF-0.1 M LiBr, 74; AcOH-0.17 M p-toluenesulfonic acid, .apprx.250; HCO2H, 2 .times. 104. Activatio enthalpies (.DELTA.H.++., kcal/mole) were 30.4 in C6H6, 27.7 in DMF,

25.5 in MeOH, 25.9 in AcOH, and 22.9 in DMF-0.1 M LiBr. An isokinetic plot of

OI DELTA.H.++. against .DELTA.S.++. (.DELTA.H.++. = .DELTA.HO.++. + .beta..DELTA.S.++.) was linear, .DELTA.HO.++. .apprx.36 kcal/mole and .beta. = 762.degree. For solvolyses of secondary benzyl systems,

.beta. - 760.degree.. In HCO2H at 126.degree., .DELTA.H.++. = 22.9 The point for HCO2H was far from falling on the isokinetic plot. The medium effects and changes in distribution of activation energies

een .DELTA.H.++, and .DELTA.S.++. suggest the racemization reaction occurs through carbanion-carbonium ion reorganization (rotation about methylene-to-cyanoacetate bond), and collapse. Bromide ion catalysis

interpreted as involving interception of ion pairs equilibrating with starting material. The carbanion produced reorganizes and collapses

ANSWER 133 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) liberate bromide ion. In HCO2H or AcOH-p-toluenesulfonic scid, racemization is interpreted as involving protonation of ion pairs equilibrating with starting material. The carbonium ion produced reorganizes and collapses to liberate a proton. The products of solvolysis are interpreted as arising from the ion pairs by either ure

ure by solvent, or by proton transfers from and to solvent. 4162-97-49 42332-47-89 42332-48-99 42332-51-49

42332-51-4P
RL: SPN (Synthetic preparation); PREF (Preparation)
(prepn. of)
4162-97-4 CAPLUS
Cyclopropanecarboxylic acid, 1-cyano-2,2-diphenyl-, ethyl ester
(, 8CI) (CA INDEX NAME)

42332-47-8 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2,2-diphenyl- (9CI) (CA INDEX

42332-48-9 CAPLUS Cyclopropanecarboxylic acid, 1-cyano-2,2-diphenyl-, methyl ester (CA INDEX NAME)

42332-51-4 CAPLUS

ANSWER 134 OF 139 CAPLUS COPYRIGHT 2002 ACS (1R,3R) - (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry. Rotation (+).

26771-06-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3R)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

26771-11-9 CAPLUS Cyclopropanecatoxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (IR,3S)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

41641-25-2 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (1R, 3R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ethyl

ANSWER 134 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1973:159048 CAPLUS MENT NUMBER: 78:159048 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: INVENTOR(5):

/8:159048
Optically active alkyl chrysanthemates
Aratani, Tadatoshi; Nakamura, Shuzo
Sumitomo Chemical Co., Ltd.
Ger. Offen., 20 pp.
CODEN: GWXXEX
Patent
German

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: German

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2240257	A1	19730222	DE 1972-2240257	19720816
DE 2240257	C3	19790913		
DE 2240257	B2	19790118		
JP 48028457	A2	19730414	JP 1971-62411	19710816
JP 52031865	B4	19770817		
US 3868401	A	19750225	US 1972-276946	19720801
IT 969536	A	19740410	IT 1972-69566	19720804
BE 787473	A1	19721201	BE 1972-120884	19720811
NL 7211012	A	19730220	NL 1972-11012	19720811
FR 2149453	A1	19730330	FR 1972-29195	19720811
GB 1380111	Α	19750108	GB 1972-38090	19720815
CH 568955	A	19751114	CH 1972-12068	19720815
DK 133974	₿	19760823	DK 1972-4030	19720815
CA 993884	A1	19760727	CA 1972-149521	19720816
RIORITY APPLN. INFO.:			JP 1971-62411	19710816

PRIORITY APPIM. INFO.: 1976012/ CA 1972-189321 19710816
AB Optically active Et chrysanthemates were prepd. as a mixt. of cis and trans isomers by the asymmetric reaction of Me2C:CICH:CMe2 with N2CHCOZEt

in the presence of a Cu complex contg. a chiral ligand. Yields were 24-67%, and the esters were hydrolyzed to give the corresponding optically active free acid.

IT 2259-14-59 4638-92-0P 26771-06-2P 26771-11-9P 41641-25-2P 41641-26-3P 41641-27-4P 41641-25-2P 41641-26-3P RL SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
RN 2259-14-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (15,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

4638-92-0 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ANSWER 134 OF 139 CAPLUS COPYRIGHT 2002 ACS ester, (1R,3S)- (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

41641-27-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

ester, (1s,3s) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 41641-28-5 CAPLUS

L7 ANSWER 135 OF 139 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1972:153290 CAPLUS
DOCUMENT NUMBER: 76:153290
Transition metal-catalyzed cyclopropanation of olefins
AUTHOR(5): Paulissen, Robert, Hubert, A. J.; Teyssie, P. CAPCRATE SOURCE: Sart

Tilman/Liege, Belg. Tetrahedron Lett. (1972), (15), 1465-6 CODEN: TELEAY Journal SOURCE:

DOCUMENT TYPE:

PIGE. Coolings
UNAGE: English
Pd-catalyzed cyclopropanation of styrene with diazo compds. was

quant. under mild conditions. Thus, PhCH:CH2 reacted with N2CHCO2Et

25.degree. in the presence of Pd(OAc)2 to give 96% Et cis- and trans-2-phenylcyclopropanecarboxylate; addn. of 3 moles (PhO)3P per

mole

Pd (OAc) 2 decreased the cis-trans ratio from 2.0 to 1.0, suggesting a coordination mechanism. N2CH2 reacted similarly with styrene. 5665-36-19 56122-28-6τт

Sous-Js-1F 30122-28-0F RL: SPM (Synthetic preparation), PREP (Preparation) (prepn. of) 5685-38-1 CAPLUS Cyclopropanecarboxylic acid, 2-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX

NAME)

36122-28-8 CAPLUS

Cyclopropanecarboxylic acid, 2-methyl-2-phenyl-, ethyl ester (7CI, 9CI)

(CA INDEX NAME)

ANSWER 136 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (CA INDEX NAME)

35749-14-5 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, 1-methylethyl

(9CI) (CA INDEX NAME)

ANSWER 136 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1972:153179 CAPLUS MENT NUMBER: 76:153179 ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

/ocipally Catalytic generation of trichloromethyl anion and dichlorocarbene in aqueous medium Makosza, M., Gajos, I. Inst. Org. Chem. Technol., Tech. Univ., Warsaw,

AUTHOR(S): CORPORATE SOURCE: Pol.

SOURCE: Bull. Acad. Pol. Sci., Ser. Sci. Chim. (1972), 20(1)

33-7 CODEN: BAPCAQ DOCUMENT TYPE:

LANGUAGE:

COMEN: BAPCAQ
JOURNAL
UAGE: Journal
UAGE: English
For diagram(s), see printed CA Issue.
The reaction of CHCl3 with olefins contg. an electron-accepting group
(nitrile, ester, or PhSO2CH:CH2) in 50% MaOH contg. a catalyticamt.
PhCH2Et3N+Cl- proceeded via Cl3C- and Cl2C: to give trichloromethyl

dichlorocyclopropyl compds.; the type of product was dependent on the electron-accepting group and on an .alpha.-Me group. Thus, CH2:CHCN

gave 40% C13CCH2-CH2CN; CH2:CMeCN gave 6% C13CCH2CH2CN and 14% I (R = CN);

and

ΙT

CH2: CMeCO2Bu gave 52% I (R = CO2Bu). 1447-13-89 1447-14-99 35749-13-49 35749-14-59 RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 1447-13-8 CAPLUS

Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, methyl ester

(7CI, 8CI, 9CI) (CA INDEX NAME)

1447-14-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl- (6CI, 7CI, 8CI, RN CN 9CI)

(CA INDEX NAME)

35749-13-4 CAPLUS Cyclopropanecarboxylic acid, 2,2-dichloro-1-methyl-, butyl ester (9CI)

L7 ANSWER 137 OF 139 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1968:104581 CAPLUS DOCUMENT NUMBER: 68:104581

Reaction of aliphatic diaxocompounds with TITLE:

unsaturated

compounds. XXVI. Synthesis of ethyl esters of 1-methyl-2-(p-tolyl)-1-cyclopropene-3-carboxylic

and

cis, cis-and

trans,trans-1-methyl-2-p-tolylcyclopropane-3-carboxylic acids AUTHOR(S): Komendantov, M. I., Suvorova, G. N., D'yakonov,

I. A. CORPORATE SOURCE:

Leningrad. Gos. Univ., Leningrad, USSR J. Org. Chem. (1968), 4(3), 371-6 CODEN: JOCEAH SOURCE:

DOCUMENT TYPE:

Journal

GUMAGE: Russian
For diagram(s), see printed CA Issue.
Addn. of carbene:CRCO2Et to the triple bond of p-MeC6H4C.tplbond.CMe

(4) gave Et 1-methyl-2-(p-tolyl)cycloprop-1-ene-3-carboxylate (II) (R = Et),

which on sapon. gave acid II (R = H). The carbene:CHCO2Et was

generated by decompn. of N2CHCO2Et. Thus, to a hot mixt. of 41 g. I and 0.1 g.

bronze powder 18 g. N2CHCO2Et was added under N at 120.degree.. The

was filtered, I was removed by distn. at 3 mm. Hg. The residue was

to give crude II (R = Et), which was sapond. with KOH/aq. MeOH soln.

give 8.5% II (R = H) m. 126-7.degree.. Esterification of II (R = H)

with

EtOH in the presence of concd. H2SO4 gave 60% II (R = Et), bO.3
89-90.degree., d20 1.0633, n2DD 1.53261, n2DD 1.53336, n2DF 1.55381.
Redn. of II (R = Et) over Pd catalyst gave 94.3% Et
cis,cis-l-methyl-2-(p-tolyl)cyclopropane-3-carboxylate (III) (R = Et),
bO.3 82-3-degree., d20 1.0342, n2DC 1.50948, n2DD 1.51353, n2DF
1.52390.
Synthesis of III (R = Et) (cis-trans mixt.) was also carried out,
analogously to the prepn. of II (R = Et), by treating
cis-p-MeCGH4CH:C-Me
(IV) with N2CHCO2Et. Previously unknown IV, bl3 71.5-3.degree., d2D
0.9001, n2DD 1.5355, was obtained by selective hydrogenation of I on
Lindlar (1952) catalyst. Hydrolysis of III (R = Et) gave III (R
= H), m. 129-3.0degree. (50% EcOH). Isomerization of III (N = H) by
boiling with p-MeCGH4SO2C1 and sapon. of the resulting anhydride gave

trans,trans-III (R = H), m. 90-1.degree. (aq. EtOH), which was converted to the trans,trans-III (R = Et), b0.3 85.degree., d20 1.0146, n20D

1.5112. IT 18397-23-4P 18397-24-5P 18397-25-6P 18397-26-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 18397-23-4 CAPLUS
Cyclopropanecarboxylic acid, 2-methyl-3-p-tolyl-, ethyl ester, cis-(8CI) (CA INDEX NAME)

Relative stereochemistry.

18397-24-5 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-p-tolyl-, cis,cis- (8CI) (CA INDEX NAME)

Relative stereochemistry.

18397-25-6 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-p-tolyl-, trans,trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.

18397-26-7 CAPLUS Cyclopropanecarboxylic acid, 2-methyl-3-p-tolyl-, ethyl ester, trans,trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS CAPLUS

ACCESSION NUMBER: 1968:39156 68:39156 DOCUMENT NUMBER:

TITLE: Chrysanthemiic acid. XVIII. New biologically

active acid component related to chrysanthemic acid Matsui, Masanao; Kitahara, Takeshi Univ. Tokyo, Tokyo, Japan Agric. Biol. Chem. (1967), 31(10), 1143-50 CODEN: ABCHA6

AUTHOR (S) :

CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: Journal

LANGUAGE: English

DAGE: English
For diagram(s), see printed CA Issue.
The rethronyl esters of a series of cyclopropanecarboxylic acids were prepd. and tested for toxicity toward the housefly and mosquito. GI AB

the following I (R3 = H) were prepd. (R, R1, R2, b.p./mm., and nD/temp.

emp. given): H, H, H, 85.degree. /9, 1.4379/21.degree.; H, Me, H, 95-100.degree. /8, 1.4378/21.degree.; H, H, Me, 100-5.degree. /15

Tablilde m. 106.degree.), 1.4400/16.degree. (rethronyl ester n16D 1.5140); Et. H.

Et, H, Me, (II) 95-100.degree. /50, 1.4430/17.degree.; H, Me, Me, 72-5.degree. /2 (annilide m. 176.degree.), -; and Et, Me, Me (III) 75-80.degree. /11,

II and III were obtained via .beta.-methyl-.alpha.-valerolactone, b6 80-3.degree., n250 1.4330, and .beta.-.alpha.-dimethyl-.alpha.-valerolactone, b11 98.degree., resp. I (R - H, R1 - R2 - R3 - Me)

m. 121.degree. (rethronyl ester, n17D 1.5091), was prepd. by

treatment of
Me2C:CMe2 with N2CHC02Et in the presence of Cus04 catalyst, and
subsequent alk. hydrolysis of the Et ester. Phys. consts. for

subsequent alk. nydrolysis of the kt ester. Phys. consts. for similarly prepd. I (R1 \* Me) are given in the table. V (b10 120-25.degree.; anilide m. 117-18.degree., n16D 1.4565; rethronyl ester n16D 1.5000) was prepd. from IV by the Arndt-Eistert reaction. [TABLE OMITTED] Alkylation

Me2C:CHC02Et with iso-PrBr and NaNH2, and subsequent treatment with

NaOEt, and then sapon. gave Me2C:C(Pr-iso)CO2H, bl1 100.degree.; anilide m. 111.degree., n15D 1.4360; rethronyl ester, n22D 1.4931. I (R = H, R1 = R2

- Me, R3 = CO2Me) (VI) (b0.06 120.degree., n13D 1.4634; rethronyl

n14D 1.4940) was prepd. by redn. of Et .alpha.-methylsenecioate with LiAlH4 subsequent acetylation gave trimethallyl acetate (VII), b45 88-92.epsee. n14D 1.14355. N2CHCOZET was added to VII to give 1(R

- Et, R1 = R2 = Me, R3 = CH2OAc), b10 115-22.degree., n14D 1.4470, which

hydrolyzed with an aq. alk. soln. and, without isolation, oxidized with

L7 ANSWER 137 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) KMn04 to I (R = H, R1 = R2 = Me, R3 = CO2H), m. 156.degree.. Esterification with CH2N2 gave I (R = R1 = R2 = Me, R3 = CO2Me), b10 100-2.degree., n190 1.4500. Subsequent half-hydrolysis with KOH-MeOH yielded I (R = H, R1 = R2 = Me, R3 = CO2Me), b0.06 120.degree., n13D 1.4634, rethronyl ester n14D 1.4940. VIII (Feist's acid, m. 199-200.degree.; rethronyl ester, n14D 1.5120) was prepd. by the

method of Goss, et al. (CA 17: 1627). The rethronyl esters were prepd. by converting the acids (except VIII) to the corresponding acyl

chlorides,
followed by esterification with allethrolone (IX) in the presence of
excess CSHSN. VIII was treated with Ac20 to give the anhydride, then
mixed with IX to give a half-ester which was esterified with CH2N2.

rethronyl ester of IV had the greatest toxicity. The correlation

rethronyl ester of IV had the greatest toxicity. The ween chem. structure and biol. reactivity is discussed. 18589-30-79 18589-31-8P 15589-33-0P 18589-34-6P 17589-33-6P 18589-34-6P 17219-28-6P 17219-28-6P 17219-29-3P 17219-28-6P 17219-28-9P 17219-28-9P 17219-34-6P 17219-33-5P 17219-34-6P 17219-35-P 17219-34-6P 17219-35-P 17219-34-9P 17219-35-9P 17219-41-9P 17219-42-6P 17219-44-2P 17219-43-9P 17219-41-9P 17219-42-6P 18611-90-0P 18611-91-1P 18718-20-2P 18718-21-3P 28518-39-0P 28758-91-8P RL: SPW (Synthetic preparation); PREF (Preparation) (prepn. of) 15589-30-7 CABLUS (COLUS COLUS CO

15589-31-8 CAPLUS

NN 15559-31-6 CAPLUS CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

L7 ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

15589-33-0 CAPLUS

NN 15089-35-0 CAPADUS
CN Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl-,
2-methyl-4-oxo-3-(2propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

15589-34-1 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 $O - C$ 
 $Me$ 
 $Me$ 
 $Me$ 
 $Me$ 

RN 15589-35-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl-,
2-methyl-4-oxo-3-(2propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

15591-18-1 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1-methylethyl)-,

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 17219-23-7 CAPLUS COPYRIGHT 2002 ACS (COntinued) Cyclopropanecarboxylic acid, 2,3-dimethyl- (8CI) (CA INDEX NAME)

17219-24-8 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl- (8CI, 9CI) (CA INDEX

17219-29-3 CAPLUS Cyclopropanecarboxylic acid, 3-ethyl-2,2-dimethyl- (8CI) (CA INDEX

RN 17219-32-8 CAPLUS CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl- (8CI) (CA INDEX NAME)

L7 ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 2-methyl-4-oxo-3-{2-propenyl}-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

15641-58-4 CAPLUS Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)

17214-86-7 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-, ethyl ester (8CI, 9CI)

RN CN (CA

(CA INDEX NAME)

17214-87-8 CAPLUS Cyclopropanecarboxylic acid, 2,3-dimethyl-, ethyl ester (7CI, 8CI,

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

17219-33-9 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propyl-, ethyl ester (8CI) (CA INDEX NAME)

RN 17219-34-0 CAPLUS
CN Cyclopropanecarboxylic acid, 3-isopropyl-2,2-dimethyl- (8CI) (CA INDEX

RN 17219-55 CN Cyclopropanecarbo (7CI, 8CI) (CA INDEX NAME) 17219-35-1 CAPLUS Cyclopropanecarboxylic acid, 3-isopropyl-2,2-dimethyl-, ethyl ester

17219-37-3 CAPLUS [1,1'-Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl- (9CI) (CA INDEX NAME)

17219-38-4 CAPLUS [Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl-, ethyl ester (8CI)

INDEX NAME)

17219-39-5 CAPLUS Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl- (8CI, 9CI) (CA INDEX NAME)

RN 17219-40-8 CAPLUS CN Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl-, ethyl ester (8CI)

(CA INDEX NAME)

17219-41-9 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl- (8CI, 9CI)

L7 ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 18611-84-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-,
2-methyl-4-oxo-3-(2-propenyl)2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$

$$0 - CH - CH_2$$

$$Me$$

$$Me$$

18611-90-0 CAPLUS
Cyclopropanecarboxylic acid, 2-ethyl-2,3,3-trimethyl-,
2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA

$$H_2C = CH - CH_2$$

Me

O

Et

Me

Me

Me

18611-91-1 CAPLUS
Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl-,
2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX

$$H_2C = CH - CH_2$$
 $O = C$ 
 $Ph$ 
 $Me$ 
 $Me$ 
 $Me$ 
 $Me$ 

1.7 ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

17219-42-0 CAPLUS Cyclopropanecarboxylic acid, 2,2,3-trimethyl-3-phenyl-, ethyl ester RN CN (8CI)

(CA INDEX NAME)

RN 17219-44-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2-[(acetyloxy)methyl]-2,3,3-trimethyl-,

ester (9CI) (CA INDEX NAME)

17219-45-3 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl- (8CI, 9CI) (CA NAME)

17219-46-4 CAPLUS
1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, diethyl ester

(CA INDEX NAME)

L7 ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

18718-20-2 CAPLUS

18:18-20-2 CARLUS Cyclopropanecarboxylic acid, 2,3-dimethyl-, ester with 2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 $O = CH - CH_2$ 
 $Me$ 
 $O = CH - CH_2$ 
 $Me$ 

18718-21-3 CAPLUS
[Bicyclopropyl]-2-carboxylic acid, 3,3-dimethyl-, ester with
2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 $O = C$ 
 $Me$ 
 $Me$ 
 $Me$ 
 $Me$ 

28518-39-0 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, monomethyl ester (8CI) (CA INDEX NAME)

CRN 17219-45-3 CMF C8 H12 O4

CM 2

CRN 67-56-1 CMF C H4 O

HaC-OH

ANSWER 138 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 28758-81-8 CAPLUS 1,2-Cyclopropanedicarboxylic acid, 1,3,3-trimethyl-, methyl ester, with 2-ally1-4-hydroxy-3-methyl-2-cyclopenten-1-one (8CI) (CA INDEX NAME) CM 1 CRN 29605-88-7 CMF C9 H12 O2

CM 2

17219-45-3 C8 H12 O4

CM 3

CRN 67-56-1 CMF C H4 0

Н3С-ОН

satd.

m. 154.degree. (benzene-ligroine). The ether filtrate was washed with cold NaHCO3 soln., water, dried, and concd. to give 77% of a mixt. (b0.5 58-9.degree., n20D 1.4645) of XVI and XVII in approx. 4:1 ratio, and XVIII, b0.7 61.degree., n24D 1.4615. XVIII decompd. to XVI and XVII when subjected to gas chromatog. Similarly, XIV was treated with PC15 in presence of pyridine (1.6 ml. pyridine/1.6 g. PC15), and the ether chromatographed on alumina to give 73% of a 3:2 mixt. of XVI and XVII (petroleum ether eluate) and 11% XIX, m. 111.degree. (C6H6-ligroine). Treatment of XIV with tosyl chloride in pyridine at 0.degree., then at room temp. and 1 hr. at 100.degree. gave 48% XVI-XVII and 50% XIX. XVI XVI and XVII have the cis configuration. Redn. of XVI and XVII with catalyst gave cis-dihydrochrysanthemonitrile. A mixt. of XVI and XVII (310 mg.), 5 mg. p-toluenesulfonic acid (XX), and 5 ml. xylene was refluxed 2 hrs. to give a 9:1 mixt. of XVI and XVII. Sapon. of XVI-XVII (3:2) (24 hrs. reflux with KOH in ethylene glycol) gave 76% of a (b0.4 97-0.degree.) of I and II. Esterification of this mixt. with CH2N2 CH2N2

gave a mixt. contg. 9% iso-cis-, 45% iso-trans-, 8% cis-, and 38% trans-methyl chrysanthemate. Redn. of this mixt. gave cis- and trans-methyl dihydrochrysanthemate. The I-II mixt. (0.6 g.)

refluxed 1.5

hrs. in 15 ml. xylene with 5 mg. XX gave 0.54 g. pure II. To 3,3,6-trimethyl-6-hydroxyheptanenitrile (10 g.) in 4 ml. pyridine was added at 0.degree. 7.4 g. methanesulfonyl chloride, the mixt. cooled overnight, added to ice, and extd. with ether to give the methanesulfonate

(XXI). XXI (1.25 g. crude) in 3 ml. dimethylformamide was added dropwise

to 0.24 g. 50% NaH in mineral oil and 5 ml. dimethylformamide, the

. cooled, added to ice, and extd. with ether to give dihydrochrysanthemonitrile (reaction temp., time (hrs.), % yield, and cis/trans ratio given): 20.degree., 5, 86, 60/40; 65.degree., 5, 86, 53/47; 100.degree., 2, 75, 46/54; 125.degree., 1/4, 70, 33% cis, 37% trans, 30% unidentified. Redn. of 95 mg. of I-II mixt. with Adams catalyst gave XXIIs (X = H, R = H), p-phenylphenacyl ester m. 100-1.degree. (MeOH). A soln. of 5 g. II in 50 ml. anhyd. ether. at

0.degree. with HCl and cooled overnight gave 95% XXIIa (X = Cl, R =

ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) 30 min. to 16.8 g. PCIS in 200 ml. anhyd. ether at -3.degree. (very exothermic reaction). The mixt. was stirred overnight at room temp. filtered, and the solid added to ice and extd. with CRCI3 to give 33

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: Synthesis and fragmentation of substituted bicyclo-[3.1.0]-2-hexanones. II.
(.+-.)-iso-trans-Chrysanthemic and
(.+-.)-trans-chyrsanthemic acids
Julia, Sylvestre, Julia, Marc, Linstrumelle, AUTHOR (S): Gerard CORPORATE SOURCE: SOURCE: Eccle Natl. Super. Chim., Paris, Fr. Bull. Soc. Chim. Fr. (1966), (11), 3499-507 CODEN: BSCFAS MENT TYPE: Journal
UAGE: French
For diagram(s), see printed CA Issue.
cf. preceding abstr. A new acid, (.+-.)-iso-trans-chrysanthemic acid DOCUMENT TYPE: LANGUAGE: and (.+-.)-trans-chrysanthemic acid (II) were prepd. Dimethyl-vinyl carbinol (86 g.) was added to 47 g. 53% NaH in mineral cil and 1.2 l. benzene, the mixt. refluxed 5 hrs. cooled to -15.degree. and 104 ml. isobutyryl chloride in 50 ml. benzene added at 0 to 4.degree. The mixt. was left overnight at room temp., added to water, and extd. with to give 108 g. III, b10 39.degree., n22.5D 1.4113. III (78 g.) was added dropwise to 24 g. 53% NaH in mineral oil and 160 ml. toluene at 110.degree., the mixt. kept 2 hrs. at 110.degree., cooled, 10 ml. HeOH added, and the mixt. added to ice, washed with ether, and acidified with 2N HCl to give 64 g. IV, b0.6 91.degree., n23.5D 1.4487, amide m. 73.degree. (ether-petroleum ether). IV was also prepd. from 2,2,5-trimethyl-4-hexen-1-al (V) and Ag2O (85% yield) and by sapon. of 2,2,5-trimethyl-4-hexen was prepd. by the method of Stork and Dowd (CA 59, 7383a). Addn. of isobutyronitrile (VII) to a mixt. of PhLi and Et2NH in ether and treatment of this mixt. With isoprene hydrobromide hydrate (VIII) gave 62% VI, 86.degree., n18D 1.4351. VI was also prepd. in 96% yield from EtMgBr, Et2NH, VII, and VIII and in 87% yield from VII, isoprene hydrochlor, NaNH2 in benzene. A soln. of 12 g. Me iodide in 20 ml. ether was slowly to 1.1 g. Li in 20 ml. ether. To this was added 2.6 g. IV in ml. ether, the mixt. stirred overnight, ice-water added, and extd. ether to give 2.32 g. IXa (X = Me)(X), b18 84.degree., n20D 1.44-66, prepd. in 76% yield by treatment of VI with EtMgI in toluene. IV and (COC1)2 in ligroine gave IXa (X = C1) (XI). XI and CH2N2 gave IXa (X CHN2) (XII). XII in cyclohexane treated with Cu powder at reflux 70% XIII, bl2 75.degree., n22.5D 1.4595, oxime (XIV) m. 90-1.degree. (ether-petroleum ether). XIV (0.61 g.) was added in small portions

ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS SSION NUMBER: 1967:85867 CAPLUS MENT NUMBER: 66:85867

ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued) (XXIII). A mixt. of ethyl and tert-amyl chrysanthemates treated with gave XXIII ethyl ester (XXIV) and XXIII in an amt. corresponding to amyl ester. Similarly, trans-ethyl chrysanthemate and HCl in ether 90% XXIV, b0.8 86.degree., n21D 1.4558, also prepd. from XXIII and diazoethane. A mixt. of 74 ml. 1.5N Na tert-amylate in benzene and g. ethyl chrysanthemate (XXV) (60% trans-40% cis) was refluxed 4 hrs., cooled, added to ice and extd. with ether to give 90% trans-esters contg.

3% cis-XXV, however the trans-esters contained 33% trans-XXV and 67% tert-amyl chrysanthemate (XXVI). The trans esters refluxed with alc. gave chrysanthemic acid and pure XXVI, b0.8 85-8.degree., n24D 1.4576. XXV (30 g.) refluxed 72 hrs. in a soln. of 20.7 g. Na in 300 ml. alc. 25.5 g. trans-XXV, b0.6 70.degree., n20D 1.4556 (contg. 8% cis-ester). XXIV treated with bases, e.g. tert-BuOK, NaH in dimethylformamide, PhNET2, or NaOEt, gave 70% XXV and 30% of the iso-isomer I. XXIV heated in C6H4C12 at 180.degree. gave the same results. XXIII heated with K in Et3COH at 20.degree., then heated 2 hrs. at 90.degree. (Brown, et al., CA.
50, 14749e) gave 94% of a mixt. of 85% I and 15% II. I, m. pentane. Similarly, XXIV (4 hrs. at 85.degree.) gave 90% of a mixt. contg. 25% II and 75% I. 705-16-8P 7377-84-6P 13899-97-3P 13902-23-9P 13902-34-6P 13902-35-7P 14280-93-49 RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 705-16-8 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, (1R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

7377-84-6 CAPLUS Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, ester. (1R.3S)-rel- (9CI) (CA INDEX NAME) Relative stereochemistry.

L7 ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 13899-97-3 CAPLUS
CN Cyclopropanecarboxylic acid,
3-(2-chloro-2-methylpropyl)-2,2-dimethyl-,
trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13902-29-9 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chlor-2-methylpropyl)-2,2-dimethyl-, methyl ester, trans- {8CI} (CA INDEX NAME)

Relative stereochemistry.

RN 13902-34-6 CAPLUS CN Cyclopropanecarboxylic acid, 3-(2-chloro-2-methylpropyl)-2,2-dimethyl-, ethyl ester, cis- (8CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 13902-35-7 CAPLUS

L7 ANSWER 139 OF 139 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropanyl)-,
tert-pentyl ester (8CI) (CA INDEX NAME)

RN 14280-93-4 CAPLUS

---Logging off of STN---

=>

Executing the logoff script...

⇒> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	613.93	894.70
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-86.11	-86.11

STN INTERNATIONAL LOGOFF AT 08:56:19 ON 18 JUL 2002

L8 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1980:42269 CAPLUS
DOCUMENT NUMBER: 92:42269
Correlation between steric structure and chiroptical

properties of 1-desoxy-2-keto sugar derivatives

of

serotonin Mester, L.; Amaya, A. Amit; Berenger, G.; AUTHOR (S):

Mester, M. CORPORATE SOURCE: 91190, Inst. Chim. Subst. Nat., CNRS, Gif-sur-Yvette,

Journal of Carbohydrates, Nucleosides, SOURCE:

Nucleotides

(1979), 6(3), 247-54

CODEN: JCNNAF; ISSN: 0094-0585

DOCUMENT TYPE: Journal
LANGUAGE: English
AB 13C NMR and CD of the title sugar derivs. show the hexose derivs. to be

present in .beta.-pyranose structure, while the pentose and methylpentose

derivs. are in .alpha.- or .beta.-furanose form. A distinct optical

has been established for both types of serotonin sugar derivs. The tetrose deriv. follows the general optical rule, established for C-1 and

and

C-2 substituted open chain sugar derivs.

T 72328-40-6 72328-41-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(C-13 NNR and CD of, steric structure in relation to)

RN 72328-40-6 CAPLUS

CN .beta.-D-erythro-2-Pentulofuranose,

1-deoxy-1-[(2-(5-hydroxy-1H-indol-3-y1) ethyl]amino] - (SCI) (CA INDEX NAME)

Absolute stereochemistry.

72328-41-7 CAPLUS .beta.-D-Tagatofuranose, 1,6-dideoxy-1-[[2-(5-hydroxy-1H-indol-3-yl]ethyl]amino]- (SCI) (CA INDEX NAME)

L8 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2003 ACS Absolute stereochemistry. (Continued)

RN 72328-48-4 CAPLUS
CN .beta.-L-threo-2-Pentulofuranose,
1-deoxy-1-[[2-(5-hydroxy-1H-indo1-3-y1)ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

72328-51-9 CAPLUS
.alpha.-L-Tagatofuranose, 1,6-dideoxy-1-[[2-(5-hydroxy-1H-indol-3-y1)ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 72328-52-0 CAPLUS
CN .alpha.-L-erythro-2-Pentulofuranose,
1-deoxy-1-[[2-(5-hydroxy-1H-indol-3y1) ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 44 OF 46 CAPLUS COPYRIGHT 2003 ACS

72328-45-1 72328-46-2 72328-47-3
72328-48-4 72328-51-9 72328-52-0
72328-53-1 72328-54-2
RL: PRP (Properties)
(Cotton effect of)
72328-45-1 CAPLUS
.beta.-1\_Tagatofuranose, 1,6-dideoxy-1-[{2-(5-hydroxy-lH-indol-3-yl}ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 72328-46-2 CAPLUS CN .beta.-L-erythro-2-Pentulofuranose, 1-deoxy-1-[[2-(5-hydroxy-1H-indol-3-y1)ethy1]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

72328-47-3 CAPLUS .beta.-D-threo-2\*Pentulofuranose, 1-deoxy-1-{[2-(5-hydroxy-1H-indol-3-y1)ethyl]amino]- (9CI) (CA INDEX NAME)

ANSWER 44 OF 46 CAPLUS COPYRIGHT 2003 ACS (Continued)

Absolute stereochemistry.

RN 72328-53-1 CAPLUS CN .alpha.-D-threo-2-Pentulofuranose, 1-deoxy-1-[[2-(5-hydroxy-lH-indol-3-y1)ethyl]amino]- (9CI) (CA INDEX NAME)

RN 72328-54-2 CAPLUS
CN .alpha.-L-threo-2-Pentulofuranose,
1-deoxy-1-[[2-(5-hydroxy-H-indol-3-y1)ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 72328-49-5 72328-50-8
RL: RCT (Reactant): RACT (Reactant or reagent)
(NMR and CD of, steric structure in relation to)
RN 72328-49-5 CAPLUS
CN .alpha.-D-erythro-2-Pentulofuranose,
1-deoxy-1-[2-(5-hydroxy-1H-indol-3-y1)ethyl]amino]- (9CI) (CA INDEX NAME)

